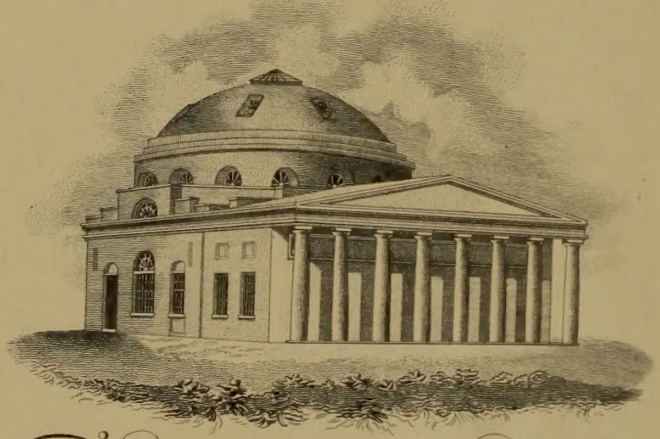
JAN 15 1941

LIBRARY
OF THE
School of Medicine



University of Maryland

Md.
Coll.

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive.hshsl.umaryland.edu) and the Internet Archive (www.archive.org).

(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1825-1833

1825, 1826, 1828, 1829, 1831, 1832, 1833

Thomas, Francis W.G. Author Unknown	Bilious Remitting and Intermitting Fever (stained) Partial thesis	1832
Dunbibin, Junius C.	Dissertation on Hepatitis	1832
Kephart, Philip	Nature and Operation of Kine Pox	1832
Howard, John Carvil	Use of Emetics	1825
Robertson, Henry M.	Rheumatalgia	1828
Lambert, John	Pneumonia Biliosa	1828
Davis, Thomas A.	Dysentery	1832
Brook, Henry	Congested Bilious Fever	1828
Jones, John H.	History of Medicine	1825
Burton, Martin	Apoplexy	1828
Moore, George	Gonorrhoea	1826
Lawrence, Daniel H.	General Doctrine of Inflammation(1)	18uu
Reynolds, John C.	De Hydrope	1831
Whiteford, Williams D.	Amenorrhoea	1829
Deas, Elias H.	Inflammation	1825
Hazelhurst, Abraham M.	Spina Ventosa or White Swelling (partially faded ink)	1825

HSHSL 2011 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

(1) text lost in inner margin during binding process

Carr, John	Hepatitide Acuta	1833
Altvater, Garrett	Puerperal Fever	1832
Laurason, Samuel	Circulation Sanguinis	1831
Spalding, F. John	Dysentery (2)	1831
Author Unknown	Use and Abuse of Mercury	18uu
Matthews, Charles H.	Peripneumony or Catarhal Fever of Children	18uu
Layton, Garrett S.	Hydrocephalus Internus	1831
Author Unknown	Puerperal Fever (partial)	18uu

(2) Text lost in inner margin during binding process

HSHSL 2011 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1825, 1826, 1828, 1829, 1831, 1832, 1833

~~1825,6,8,9, 1830,1,2~~

Thomas, Francis ~~W.S.~~ W. G.	Bilious Remitting and Intermitting Fever	33p.	1832
Dunbibin, Junius C.	Dissertation on Hepatitis	12p.	1832
~~Hephart~~, Kephart, Philip	Nature and Operation of Kine Pox	13p.	1832
Howard, John Carvil	Use of Emetics	12p.	1825
Robertson, Henry M.	Rheumatalgia	19p.	? 1828!
Lambert, John	Pneumonia Biliosa	10p.	1828
Davis, Thomas A.	Dysentery	10p.	1832
Brook, Henry	Congested Bilious Fever	9p.	1828
Jones, John ~~H.~~ H	History of Medicine	33p.	1825
Burton, ~~M.~~ Martin	Apoplexy	13p.	1828
Moore, George	Gonorrhoea	9p.	1826
Lawrence, ~~D. A.~~ Daniel H.	General Doctrine of Inflammation	16p.	1[illegible]
Reynolds, ~~Johanne~~ John C.	De Hydrope ~~Acuto~~	23p.	1831
~~Whitefield, Wm. G.~~ Whitefeard, William D.	Amenorrhoea	14p.	1829
~~Deus, Harrey E.~~ Deas, Elias H	Inflammation	18p.	1825
Hazelhurst, ~~A.~~ Abraham M.	Spina Ventosa or White Swelling	15p.	1825
Carr, ~~Johanne~~ John	Hepatitide Acuta	10p.	1833
~~Altwater~~, Altvater Garrett	Puerperal Fever	19p.	1832
~~Lawson, Samuel~~ Lawason, Samuel	Circulation ~~Sanguinis~~ Sanguinis	14p.	1831
Spalding, F. John	Dysentery	15p.	1831
~~Anonymous~~ Authar Unknown	On Use and Abuse of Mercury	24p.	

4

Matthews, Charles H.	Peripneumony or Catarhal Fever of Children	19p.
Layton, Garrett S.	Hydrocephalus Internus	13p. 1831
Author Unknown ~~Anonymous~~	Puerperal Fever (partial)	11p.

4

An Essay

on the cause of

Bilious Remitting and Intermitting Fever

Respectfully presented

To the

Provost, Trustees and Medical Faculty

of the

University of Maryland

By

Francis W. S. Thomas.

of Virginia.

UNIVERSITY OF MARYLAND
LIBRARY
Founded 1813
SCHOOL OF MEDICINE

WMb
18863

1588

The attention of Physicians has been directed to those diseases which prevail in warm and damp countries during the hot season; ever since the healing art has been practised. Are not even at this late period, those epidemics are involved in so much obscurity, as still to remain the subject of animated disputes among pathological writers.

The names Bilious Remittent and Bilious Intermittent Fever seem to relate rather to circumstances attending, than to the cause which produces the disease. However, mankind are now pretty well agreed in referring all the forms of Bilious fever to a peculiar product of decomposing vegetable matter (as a cause) which they call Malaria. But no one so far as I know has ever told the world what this Malaria is, or it's essential qualities; or in what way it acts upon the human body in the production of fever.

To make a few remarks on the nature of this cause, and it's mode of action, is my present intention; and although I am deeply impressed with the difficulty of the task, and fearful of my inability to add a single valuable truth to what is already known; yet I am encouraged to proceed by the entire confidence in the generosity of those, to whose inspection this essay will be submitted.

It would be impracticable to give a detailed account of the various forms under which Bilious fever displays itself in a treatise consisting only of a few pages. Nor is it essential to my purpose on the present occasion to do so; But as it is necessary in order to learn the manner of the action of any agent, first to examine it's effects - I shall be compelled

in the progress of these remarks to notice many of the symptoms which characterize the disease.

Assuming the fact (which I believe is not now disputed, that Malaria (or Noxious Miasmata) is the cause of Bilious Fever in all its forms; And also that Malaria is produced by the action of moisture and heat on vegetable matter, causing decomposition. The first thing to be considered is What is the nature of this deleterious matter? There are few persons who have not seen bubbles of Gas rising from the bottoms of ponds and other bodies of stagnant waters when their mud is mixed with leaves weed &c. If the water and filth be stirred, so much Gas will escape that the surface of the water will seem to burn if a torch be applied to it. This is the light carbureted hydrogen Gas: It is abundantly produced in all situations where there are vegetable substances, to be acted on, and heat and moisture enough to act on them. It is also produced in the animal stomach and alimentary canal by the decomposition of the food they recieve.

Now to be convinced that this Gas is the secret foe, that has so long tormented the human race, It is only necessary to collect a sufficient quantity and inhale it for some time. This has been done by an acquaintance of mine and the effect was a quotidian fever. And as that Gentleman has as I am told prepared an essay on the subject I shall not detail the experiment.

This however is sufficient to establish the fact that Malaria is light carbureted hydrogen Gas: And therefore the next thing to be considered is, on what portion of the human body is its impression first made? It appears to me that the mucous membrane of the stomach and alimentary canal is so constituted by nature that it cannot recieve the primary impression of Malaria.

Were it not so, the decomposition of our food, would at all times furnish carbureted Hydrogen Gas enough to keep us constantly labouring under bilious fever. I am aware that there seems to be some inconsistency here; for I have just said that intermittant fever was produced by applying the Gas to the Mucous Membrane of the lungs; but I cannot help this seeming inconsistency if any person is disposed to consider it such. I can only answer that in smelling and tasting, we have instances of mucous membranes which are capable of receiving impressions that no other part of the same tissues can receive. Let us now enquire whether there is any other part besides the lining of the bronchial tubes, that is capable of receiving the deleterious impression of this poison. I think there is; the same air that is inhaled into the lungs is also in constant contact with the external surface of the body. This is a sentient surface and we know that it does receive various impressions, and transmit them to the sensorium.

However, let the impression be first made where it will whether on the mucous surface of the lungs only, or on the lungs and skin there is but one way for it to be transmitted from thence to other parts of the body, unless indeed it is taken into the blood vessels and that is a notion which hardly seems tenable.

I now come to speak of the manner in which the cause operates in producing bilious remittant and (as they are called) intermittant fevers. I shall state my opinion as briefly as possible and afterwards endeavour to enumerate the symptoms in the formation and progress of an attack of fever which lead me to the adoption of that opinion. The cause impinges on the nervous extremities and the deleterious effect is conveyed by the nerves to their common centre the brain and spinal marrow and from thence again distributed

to every part of the system, deranging all the senses, disturbing all the functions, and viciating all the secretions.

The controling power of the nervous system is destroyed, the balance of power between the different parts is lost; and there is not a healthy action going on in the whole machine.

That the brain, spinal marrow, and nerves are first affected, I think may be shewn by noticing what takes place prior to that which is commonly considered the commencement of an attack of Fever (the developement of a paroxysm) and that they continue to be greatly disturbed may be proven by many of the phenomena which characterize the disease during the whole of its course.

One of the first premonitory symptoms is an inability to think coherently. A man finds himself incapable of arguing on any subject, or of dictating a letter; his mind is easily excited and he is more fretful than usual; he feels some giddiness and an indescribable sensation of languor; more like fatigue than any thing else. His muscular power begins to be impaired, he is loath to use any exercise, and if he sits long in one position, there is a painful sensation of fatigue along the course of the spine. He soon experiences dull aching sensations in his legs and arms, and sometimes wandering sharp pains, which he is apt to say are in the bones. If he attempts to read a finely printed book, he discovers that his sight is defective for in a short time the letters will appear mingled together. The sense of smelling is either obtuned or painfully acute. Nothing has its natural taste; and his hearing is impaired by tinnitus auriuum.

The skin is morbidly sensible to the contact of cold or damp air, and he is also unable to bear the effects of the sun's rays. His digestion is impaired and his food lies heavily in his stomach Sometimes there is anorexia and sometimes even loathing of food

but neither of these is an invariable occurrence.

The bowels at this time may be either costive or looser than common, but there is generally borborygmi, and when there is costiveness it seems to arise from a want of power in the muscles to expel the contents of the rectum.

The urine is tinged of a reddish colour, and the saliva of the mouth is viscid and frothy. Very often there is horripilation, and a general sensation of restlessness which a man must feel to understand. I cannot describe it. The tongue at this period is commonly slightly covered with a white or yellowish slimy looking coat, and the pulse is rather quick and irritable, but not hard.

Any thing calculated to weaken at this stage of the symptoms will bring on a chill. even bleeding or a dose of cathartic medicine will be apt to have that effect; and hence the patients will often affirm that the medicine gave them the chills as they call it. I believe that it often changes what would have been a remitant to an intermitant fever, but it <u>will</u> hasten the paroxysm. If they are let alone the symptoms will gradually increase until, sometimes a fever is developed without any initial paroxysm; but in by far the greatest number of cases they assume the regular paroxysmal form.

Sometimes there are other symptoms but as they are frequently occur I have omited them. I have lived long in a country where bilious fevers prevail epidemically. I have several times had the disease; and have seen hundreds of cases.

There is now a set of pathologists in the world who contend that these fevers are produced by gastro enteritis. I am willing to admit that vitiated secretions may cause inflammation of

the mucous tissue, if they are not removed; or if the disease is not relieved before inflamation can take place. But these secretions cannot exist without a cause. In my view they are only the effect of an effect; but if we leave the secretions out of the question and say that inflamation is caused by initation; they only get one step nearer to the beginning of the disease; for initation cannot cannot take place without a cause.

These gentlemen apeer too much, and claim too much credit for their autopsie examinations. These examinations will prove nothing about the remote cause of fever; nor will they prove that patients who get well ever had gastro enteritis.

They say there is nusea and vomiting: so there is in many cases, but I think I shall be able to shew when I speak of a paroxysm of fever; that this vomiting is sometimes caused by gastralgia - I do not know at what period of disease action these pathologists will allow fever to begin; but it appears to me that if they would be a little more moderate in their demands upon our credulity, and only ask us to believe that gastro enteritis does sometimes takes place in bilious fever, we should be much more likely to end, a very unnecesary dispute.

A chill usually commences with a sensation something like cold water running along the course of the spine, the extremities become cold, and the blood collects around the roots of the nails - at this period there is commonly, though not always great thirst - the patient incessantly calls for water and soon distends the stomach so much that vomiting is produced and this sometimes gives temporary relief but the same symptoms soon return.

A burning sensation in the stomach is an indication

that it entains an acid, and a sickening deadly sensation of weight, indicates the presence of bile. It is truly astonishing to see what quantities of bile are sometimes ejected during the cold stage of a fever, and how rapidly it is reproduced.

But to proceed with the subject of the symptoms in the order that they occur is my object; if my memory will enable me to do so. The blood retreats from the surface and the skin becomes pale and contracts to such a degree as to give it what is vulgerly called the gorse skin appearance. The head is sometimes hot during the whole of the cold stage; and it is often the case that the patient complains of rigors, when the whole surface except that of the extremities feels preternaturally warm. The most alarming symptoms however to the patient; are spasmodic such as contraction of the muscles of the arms & legs; but more frequently the stomach and respiratory muscles are thus affected: producing violent pain in the first mentioned organ and frequent vometing (gastralgia) and very difficult respiration approaching almost to suffication. Now these symptoms I think are nervous, because they may be relieved by anti-spasmodic remedies:- such as the warm bath, hot stimulating drinks, laudanum &c - There is violent pain in the back of the neck, back and limbs, indicative of disease in the spinal marrow and large nerves - These symptoms commonly continue through the cold and hot stage - Frequently there is griping pain in the bowels too - but the bowels have nerves, and I have seen this pain relieved by warm stimulants.

I cannot describe the pulse of the cold stage of fever but a man who is accustomed to feeling it can generally tell when the pulse indicate the approach of a chill.

The coldness gradually subsides, giving place by degrees to what is called the hot stage; which when completly formed presents in many respects an exact contrast to that which preceded it. The countenance is full and flushed the skin is painfully hot, and the patient feels as if he were breathing a burning atmosphere. The head-ache increases. the pain in the neck, back and limbs continue and sometimes increase in violence. There is sometimes a wringing pain as if some of the lumbar vertebae would be wrenched asunder and I have also heard patients say they felt like their legs would break off at the ankles.

The thirst and the puking likewise continue. Indeed the latter symptom sometimes comes on, only with the hot stage, and neither of them is an invariable symptom of either stage.

Very often the stomach feels painfully distended, as if with air and eructation will relieve it for a short time. Sometimes there are rigors throughout the hot stage, the patient complaining of coldness whenever he moves or swallows any thing.

He is often alarmed by a feeling of numbness in the arms and legs; and there is a universal restlessness which may be seen in his countenance and which renders it impossible for him to remain still.

The pulse in the hot stage is either small and hard, or full large and bounding, but not very hard. The first requires bleeding; in the last it does no good to bleed.

The diversity of character which these fevers assume especially intermittents (or those which we call so) can hardly be accounted for in any other way than by referring it to diseased action of the nerves. Indeed the paroxysmal form itself, I think will be found on close investigation, to belong only to the neuralgic

class of diseases.

In malarious countries it is not uncommon to have intermittent jaw aches, head aches, pains in the sides, in the ears in the stomach, or in one or both eyes - that are as regular in their paroxysms as any form of bilious fever, and relieved by the same treatment that will relieve any other intermittent.

Intermittents that are not inflamatory may be cured or stopped at least, by anodyne medicines, and even those that are inflammatory may be relieved by the same means after a little depletion -

A dose of Opium and camphor 30 or 40 drops of Laudanum or a sufficient dose of any warm stimulent, administered an hour before an expected paroxysm will commonly prevent it. It is often stopped by strong mental excitement; which I think is another proof of its nervous origin - I once saw a singular case, where a lady had alternate paroxysms of chill and fever one day and tooth ache the next. This tooth ach I do not think could be referred to gastro enteritis.

I also once witnessed a severe and protracted case of bilious remittent fever, in which nearly all the pain the patient ever complained of was in the heel.

I do not think it necessary to describe the sweating stage. It sometimes does not take place, and altho it often does I think it should in most cases be considered a healthy rather than a morbid process.

I shall close these remarks. I wish they were better, but I am labouring under ~~disease~~ indisposition and cannot make them so.

=ification of diseases, but few traces of its pal character are to be found. With the exception of Willan's work on cuta=neous diseases, and Bateman's Synopsis compiled chiefly from Willan, I know no publication either on general diseases, or on eruptive disorders more particularly, which contain such an account of the distinctive features of this affection, as would furnish diagnostic marks sufficient for its easy and correct discrimination. None of the species into which the erudite, and indefatigable author of "The Study of Medicine" has divided his Genus "Ecthyma" comprehends a full definition, or a correct history of the characters, progress, and terminations of Ecthyma Cachecticum, as I have observed it myself, and find it distinguished by a writer on the subject to be referred to in another part of this essay. Even Bateman with his cha=racteristic accuracy of knowlege, and facility of repre=sentation, or diseases of the skin, has failed to make with adequate precision, some of the prominent expres=sions of this affection, and at least one of its remarkable characters, which I have and incline to think constant and invariable, in the mature state of this disease has been wholly overlooked or omitted in his description. Neither does them appear in Bateman's account, a proper diagnostic discrimination, of the eruption under consid=

=ration from those Exanthems, which are purely symtom.
of certain constitutional morbic states either specific, o
general; as Syphilis, Scurvy &c. He states in fact that
Ecthyma Cachecticum much resembles some of the pecu
=liar cutaneous symptoms of both these forms of disea
though he appears to think that it is not necessarily s
often, the effect of Syphilitic contamination, and a
=s that it requires the treatment suited to that affection
While I acknowledge the great probability, that the form
of eruptive disorder I have undertaken to report as it presen
itself to my observation is always dependant for its occurre
on a vitiated state of the whole system, and may thus pro
=perly rank as symtomatic, I am disposed to regard it as
holding a peculiar relation to some especial, or particular
manner, or kind of depravation going on in the general ec
=nomy; and that the cutaneous affection is strictly consec
=tive of some predominent mode, or train of functional, and
(ultimately) structural impairment. I would at the same
time exclude the admission of its symptomatic relation
to any known specific constitutional disorder.
I adventure the foregoing opinion with due respect, fo
the differing sentiments of writers better informed than
myself, and with a full perception that such an opinio
does not clear the question relative to the intrinsic charac

of the disorder, of greate obscureness and uncertainty.
There is a manifest difficulty in detecting the true nature and causes of most of the Exanthemata, and the intimate, or direct modes of relation, or production, can be intelligably traced in none of the eruptive affections. - Our pathology of diseases which devolve a part of their effects upon the surface is particularly indefinite, and imperfect; it is only by a certain degree of parti-cularness of external aspect, progress, and termination, that we make up a particular nomenclature of cutaneous diseases, and arrive at general conclusions as to the indications these affections furnish of presumptive connexion with some constitu-tional state.

The opinion I have expressed that the cutaneous disorder denominated Ecthyma Cachecticum differs materially from all the Exanthems which are indefinate and irregular in their character, and depend on various modes or kinds of constitutional irritation; is founded on the uniform fact (as far as I can ascertain) of a peculiar set of marks always appearing in the former disorder in a certain order of succession, and as uniformly followed by a particular consequence, or change of structure in the parts on which it was displayed. This fact (as I conceive it to be) char-acteristic of the genuine forms of Ecthyma Cachecticum, has been overlooked by the learned and discriminating

=ration upon those Exanthems, which are purely symtomat
of certain constitutional morbic states either specific, or
general; as Syphilis, Scurvy &c. He states in fact that
Ecthyma Cachecticum much resembles some of the secon
=dary cutaneous symptoms of both those forms of disease
though he appears to think that it is not necessarily m
=ore often, the effect of Syphilitic contamination, once dev
=es that it requires the treatment suited to that affection

While I acknowledge the great probability, that the form
of eruptive disorder I have undertaken to report as it presents
itself to my observation is always dependant for its occurren
on a vitiating state of the whole system, and may thus prop
=erly rank as symtomatic, I am disposed to regard it as
holding a peculiar relation to some especial, or particular
manner, or kind of depravation going on in the general ec
=onomy; and that the cutaneous affection is strictly consecu
=tive of some predominent mode, or train of functional, and
ultimately structural impairment. I would at the same
time exclude the admission of its symptomatic relation
to any known specific constitutional disorder.

I adventure the foregoing opinion with due respect, for
the differing sentiments of writers better informed than
myself, once with a full perception that such an opinion
does not clear the question relative to the intrinsic charact

of the disorder, of greate obscurenes and uncertainty.
There is a manifest difficulty in detecting the true nature and causes of most of the Exanthemata, and the intimate, or direct modes of relation, or production, can be intelligably traced in none of the eruptive affections. - Our pathology of diseases which devolve a part of their effects upon the surface is particularly indefinite, and imperfect; it is only by a certain degree of sameness of external aspect, progress, and termination, that we make up a partial nomenclature of cutaneous diseases, and arrive at general conclusions as to the indications these affections furnish of presentive connexion with some constitutional state.

The opinion I have expressed that the cutaneous disorder denominated Ecthyma Cachecticum differs materially from all the Exanthems which are indefinate and irregular in their character, and depend on various modes or kinds of constitutional irritation; is founded on the uniform fact (as far as I can ascertain) of a peculiar set of marks always appearing in the former disorder in a certain order of succession, and as uniformly followed by a particular consequence, or change of structure in the parts on which it was displayed. This fact (as I conceive it to be) characteristic of the genuine forms of Ecthyma Cachecticum has been overlooked by the learned and discriminating

Bateman, and the only mention of the circumstance I have met with is in a well written paper on the disorder in q-ption, by Doct.r Henson of Philidelphia, and published in the North American Journal of Medicine and Surge

In that paper the appearance of the skin left after the evanis-ion of the pustules is noticed as particularly obvious, and singular; and in a coloured print, representing the various c-racter, progress, and result of the eruption, the effect, or ch-nge referred to is distinctly and well defined. This change which I consider proper if not peculiar to the part affected which whether in the European, or African loses their former complexion, and becomes of a peculiar dull pearl or ash gray colour, wholly dissimilar from the aspect of other parts, which have not been the seat of the eruption. The skin of the surface thus affected by the change described, presents in some degree the character of a cicatrix from burns or scalds, smo- in the centre, and puckered at the edge, but differing from s-cars of burns, or scalds in being always depressed, or indented to an extent corresponding to the marginal outline of the pus-les which had occupied the seat. In the latter respect these Ecthymatous cicatrices put on very much the appearance of permanent pores of small pox; varying chiefly in the uni-al, and often much larger surface of indentation in the f-mer than in the latter disease. The depth of excavation

also less than in the strongly marked pits of small pox.

Doctr Henson (as before remarked) has well described the ultimate changes occurring to the seate of the Ecthymatous pustules, but he speaks of these changes as probably accidental in the case of his patient, because no similar consequences have been mentioned by Bateman in his account of the disorder. I respectfully differ from Doctr Henson as to the accidental occurrence alluded to and from having found the same most prominently remarkable in the two cases which fell under my care, I am disposed to consider this peculiarity of pustular termination, as constituting one of the best & uniform characters, and at the same time one of the best diagnostics of the disorder. It was from the explicit account, and accurate representation of this symptom furnished by Doctr Henson himself, that we were enabled, at once to refer the cases presented to us, to their appropriate classification. I would further remark, that it may from the omission on the part of Doctr Bateman to notice at all, the very prominent mark in question, I have the liberty to express a doubt, either of the correctness of his information, or of his usual precision in his account of this affection.

With one other observation, I abstain from further speculation on the nature of a disorder which I have in the following pages described as it fell under my notice.

In assigning to that disorder something of a peculiar character discriminated from common symptomatic eruption, I was influenced, and seem (to myself at least) to be sustained, by its power of stamping a distinct, and indelible impress on the structure invaded; - It is also very remarkable that the surface (those points of it) which has once suffered effects of the disorder loses entirely its susceptibility, to a second similar process. Neither of the consequences here noticed as ensuing to the eruption of Ecthyma cachectica obtain in relation to the results of any of the common pustular affections of the skin; The latter seldom, if ever change the complexion, or sensibly alter the contexture of the part on which they supervened, and from which they were thrown off. The peculiar, and abiding mark left after desquamation of the Ecthymatic pustule, has its analogy best displayed in the local effects of some of the specific exanthems, and among these the consequences of variola bear the most manifest resemblance. After all I have said upon the subject, however I wish it to be understood, that I am not disposed to claim for the disorder in question, the rank of a strictly specific independant disease. It is perhaps not proper, or possible, to separate the affection at it is exhibited on the surface, from some serious derangement of the constitution, in some, or many of its important functions. The elaborating, and

distributing offices of the Acconomy are all sensible affected, perhaps antecedent, certainly in connexion, with the eruptive demonstration; as is indicated by concomitantency of the digestive process, by defective nutrition, and by more, or less explicit degrees of general febrile irritation. - This disorder also runs a course, (or endures for a time) far too long to be considered the result of a specific, exanthemous action: all diseases of a distinct specific eruptive character, are defined by terms of duration, not less regular, than their other individual & peculiar modes of existence.

Case 1st) Charles Banks (Colored man) was admitted into the Baltimore Alms-house 19th of June 1827. His account of himself is that he was born in Maryland, and had followed the occupation of a seaman for the last three years. He sailed from Baltimore to the Island of St. Thomas, some time in the summer of 1826, and when he left Baltimore was in good health, and very fleshy. He remained at St Thomas about one month, during which time he was almost constantly in the water, surrounded by the surf, the sea, or bottom of the river in which he was at work was soft, and composed of foul, black sand, which exhaled so offensive an effluvium, as to create nausea of the stomach, and entirely take away appetite for food; when not at work

among the food, matter alluded to felt as well as usual. He left St. Thomas, in good health, but on his voyage to Baltimore was attacked with invincible dulness, (or as he terms it, stupidity, and listlessness, accompanied with incipient pungent headache, and constant tendency to sleep. This state lasted four, or five weeks during which time his appetite was generally good, with daily alvine evacuations, of (as he thinks) natural appearance.

Shortly after his arrival in Baltimore from St. Thomas, his appetite began to fail, attended by other symptoms of gastric dis-order, as nausea, sometimes vomiting, eructations, pains in the stomach, and bowels, and costiveness. His health soon began to decline sensibly, and he fell ultimately, into what is denominated general ill health, with great emaciation, attended by constant pains in his limbs. In consequence of this state he entered the Baltimore Hospital August 21st 1826.

At the Hospital he was put under a mercurial course and in a short time a very profuse ptyalism was produced which was kept up for two, to four weeks, and then followed for some time by an infusion of vegetable bitters with small doses of sulphuric acid. He represents that at this period his passages became bloody mixed with mucus, and attended by pain and gripping

with each motion. On the appearance of those symptoms the mercury was resumed, and ptyalism again produced, which was continued two weeks, when the bowels became less irritable, and the ejections assumed at times something of the natural appearance. The second ptyalism was followed, as the first, by the tonic infusion.

It was at some time period between the first, and the second salivation that a papular eruption made its appearance on the forehead around the verge of the hair, then successively upon the face, neck, trunk, and limbs, and at the time of his admission into the Baltimore Alms-house, (eight months after the first appearance of the eruption) the whole body was overspread by the disorder in its various stages of progress, from the minute papular, to the full pustulous and unquestionable condition. Many points of various magnitude were also apparent, on different parts of the body; which had been the seat of pustules that had run their course, and had left their peculiar stamp of colour, and character on the parts they had occupied.

This patient represents that he has never had Syphilis, or any constitutional disease of which he is apprised. He bore at the time of his admission into the Alms-house, some of the obvious marks of that state of the system denominated "Cachexia" particularly much enlargement of many of the conglobate

glandy, those of the neck especially, and in some degree of the inguinal glandy. But it was then wholly impossible to discriminate with any certainty whether this glandular enlargement, were the result of an original pharmorous diathesis acted upon by causes affecting the general health, or were solely and strictly the effect of irritation propagated to the lymphatic system (from the general morbid state) and existing independent of any primary Scrofulous taint.

As we did not see this patient until the 19th of June last eight months after he began to pass from the peculiar form of disorder he is represented to have exhibited on his admission into the Alms-house, and as the patient was uneducated (though intelligent for one of his class) it was impossible to obtain satisfactory information on all the circumstances immediately preceding, and connected with the forming state of this disorder; and for the same reasons only a general account could be collected of the character, course, and consequences of the constitutional and local disease, up to the period of his admission into the Alms-house. These impediments necessarily render the present report of the case less full, and explicit than is desirable.

The cutaneous affection (at the time of the patient's admission (as before stated) had extended over the whole body, affecting successively the face, neck, trunk, & extremities,

hands, feet and flexures of the joints did not escape the eruption, as is stated by Dr. Henson to have been the fact, in the case of his patient. Some of the pustules had arrived at maturity, and others were in the incipient stage, so that the surface was thickly studded with the eruption in its various stages, from the forming to the terminating state. Some of the pustules on the arms, breast, and different parts of the body presented the summits of a whitish colour, the base (as the patient was black coloured) could not be distinctly discriminated. As the inflamation declined laminated scales formed upon their tops which after intervals fell off, leaving the surface on which they had formed of a peculiar complexion, irregular figure, & depressed, resembling as if the pustule during its desquamation had partly penetrated the true skin. The cicatrices left by the desquamation represented every where over the body the same uniform character, varying only in extent, and were from one quarter to three quarters of an inch in diameter. These cicatrices had a good deal the appearances of the scars from burns, but exhibiting spots of pinged or discolouration, being a dull white, or what Doctr. Henson denominates a pearl, or ash grey tint.

It is worthy of remark that after parts had once undergone the regular stages of the eruption, they seemed to lose all liability to suffer a second attack. In no instance did the pustules reappear on parts previously occupied by them; the indelible

scar once formed secures an effectual preventive of the erupt
on the same spot.

The patient at the time of admission into the Alms hou
was much debilitated; his appetite variable, tongue some
what enlarged of a high red colour, furred at the root, but
exhibiting over the surface, a smooth polished appearance,
~~with their papillæ of a more than natural~~ with thin patches of a white (lymph) coat, dispersed over it in
places. The bowels were irregular in their function, some
constipated but generally loose, with most commonly a sense
uneasiness, amounting to pain or griping, the abdomen some
contracted, & hard; the alvine discharges were thin, garnish,
yellowish of a mucous appearance and smell. The patient's p
was generally above the natural temperature, dry, harsh & tig
There was always more, or less feverous reaction, moveme
of the circulation, and for upwards, the fever continued, a
all stages of the eruption, once for upwards of two month
a constant authisine, or hectic prevailed with much depres
of strength, and spirits.

Treatement. At first the patient was put under the
use of small doses of Plummers pill, a well known compo
=und of Guaiac, Sulphuret of Antimony, & Calomel. This me
=dicine was given not with the design of producing full mer
=curial impression, but to correct the morbid state of the sy

=to poetic organs and skin. Both were evidently much changed, in function, as was manifest from the character and circumstances of the eruption; the state of the alvine evacuations; the greater emaciation resulting from the lost, or altered office of the digestive and assimilating instruments. With the pills he was directed an infusion of Sarsaparilla, Gentian, Guaiacum, & Orange peel; and his diet regulated by the general inclination of the case, his food consisting of articles, whose alimentary matter might be most easily elaborated, and leave the smallest amount, and least irritating quality of excrement. The pills were continued until a slight ptyalism appeared, when the dejections became nearly natural in appearance & number. The pills were omitted, but the infusion continued for some time after.

About this time viz: from four to five weeks after the patients admission, and the prosecution of the treatment above, his general health seemed to be somewhat amended; his appetite was better, bowels more regular, skin soft, and the temperature of the surface nearly natural. The pulse still continued small, rather frequent, and evincing a tendency to hectic exacerbation in the evening, with pains of the limbs (similar to chronic Rheumatism) sleep disturbed, & unsatisfactory. The eruption had sensibly declined on the face, neck, & arms, and the pustules on the trunk had disappeared

=ared extensively,

leaving depressions once pears at first of a dark red colour, b
soon changing to the ash, or pearl gray hue before described

The Sarsaparilla infusion (or decoction) was continued
in the form denominated the "Tisan of Vinache" a prep
=ation much used in France, and on the Continent for ca
=etic and cutaneous affections. The combination is Sarsap
=illa, Guaiacic, Sassafras, senna, and Sulphuret: antimo
praparat. All other medicine was suspended except an
occasional mild cathartic (made doses of Jalap & Sulph
=ate of potash.) to make more the bowells when tosp
Under this course the eruption began to fade away on e
parts of the trunk and extremities; very few new pustu
made their appearance, and most of them naturally
matured fully. From the old eruption the scabs contin
to fall off, leaving and portions of the skin to assume a
healthy condition; the peculiar and permanent cicatrix
discoloration, so often spoken of not only occurring in
place of all the pustules; but only of those which had bee
perfectly developed and completed their normal changes.
The patients appetite was good, and food was taken with
great relish, the tongue lost its natural red & swollen
appearance, the bowells became regular, and stools nat
By the miadle of August there was a striking amend
=ment in the patients whole appearance. The countena

before pad and dispirited had assumed a cheerful aspect, the face from being thin and wan, became comparatively full & animated. The whole person of the patient exhibited a similar improvement; indicating that the actions of repair now predominating over those of waste, the body gaining new substance, and increased power. A very remarkable change had occured in the state of the skin, which was no longer dry, harsh, and contracted, but every where moist, soft, and free.

The patient was now in every obvious respect decidedly convalescent, and could he at this time have enjoyed the benefit of change of air, and diet; relief from Hospital confinement, exercise suitable to his strength, with all collateral means of invigoration, it seems probable his recovery would have been complete. But all those aids to health were out of his reach; he was incapable of labour, and forced to remain for the present a pensioner on the public charity. He continued in the Hospital, and for many weeks his system seemed to maintain the advantage which had been gained. In a month, or six weeks (about the last of September) it became necessary again to pay particular attention to his case. The cutaneous disorder had not reappeared, but the digestive organs were falling into error. The appetite languished, the bowels were flatulent, and disposed to diarrhea, with griping

before and during evacuations; the objections then to yellow.

The blue mass (pil hydrarg) was prescribed for him with Rhubarb and opium. (℞ pil. Hydrar, et pulv Rheii ā ā 19. pil opii. 1/6 gr. ter in die. This medicine checked the diarrhœa the alvine movements became natural in frequency & appearance and the patient seemed again improving. To complete the amendment, a tonic course (of the vegetable bitters) was instituted, and every possible attention paid to the properly the patients diet. By these means his health was kept at a medium for some time; but he was only preserved from falling off & did not gain ground, a more correctly speaking, did not advance on the scale of health; it was evident that his system wanted the reviving impulse of change of place and circumstances.

As the cold weather came on (in the month of November) this man was annoyed by wandering pains of the muscular system, simulating chronic Rheumatism; which troubled him much by day & night; and then was some swelling of the joints of the inferior extremities. The eruption continued absent, with the exception of an occasional small pustule which in no instance matured. On account of the apparent Rheumatic tendency & no fever existing to counter indicate the the plan, the patient was placed under the use of Sarsaparilla, Guaiacine, & Capsicum in infusion; he took

also Gum. Guaiac & Capsicum Gentian in powder. He was benefited by this course and continued it with some intermission, until the first of January of the present year. At that time all medicines were suspended, and only temporary attention paid to the regulation of his bowells. At this time the patient was not quite so well as he was at the end of the first two months following his admission into the house; but his system seemed incompetent to make further progress toward recovery, & medicines were in a greate degree withdrawn, because there was no prospect of additional benefit from their further use. I ought to have been mentioned before that the glandular enlargements which the patient brought into the house with him (them of the neck & groin), never subsided sensibly, even during the period of his greatest amendment.

In the early part of Febuary the patient was attached by diarhea, of which he made little complaint until it became so bad, as to be attended by almost involuntary evacuations. Great pains were then taken to correct the disorder, by a strict regulation of the diet & the use of means which had been often used in the house with success in chronic, and incitable diarhea. The medicinal agents were chiefly an infusion of Capsicum Vinosa liatum; and Cortex pelmi Rubri; with Opium & small portions of Ipecacuan and Camphor, at intervals. Enemata of mucilage (Sem. lini) & laudanum

were also resorted to. By those means the diarrhea was restrained but so exhausting had been its effects, that the patient was more prostrated by it in a few days than by months of previous ill health. The arrestation of the diarrhea was followed by severe tormina of the bowells consisting in acute pain without con=vulsions, and a cough (which the patient had experienced occa=sionally in a slight degree) past in accompanied after a day or two by Hemoptesis somewhat profuse. To this formidable com=plication of symptoms the patient fell a victim about the latter end of February.

The subject of the preceding history was examined after d and the whole of the abdominal viscera exhibited decided ev=idences of inflammation & its effects. The mucous membrane of the small, & large intestines shewed the most prominent traces the most permanent results of irritation & its consequences. The lining of the whole digestive tube was diseased, & patches of ulceration of various extent, were discovered in every part of the tract. Those ulcerous patches were from one fourth of an inch to an inch in diameter; some of the ulcers were superfi=cial others deep having destroyed both the mucous & muscular coat, leaving entire only the peritoneal covering; a few of the ulcers had penetrated all the coats, & some of the fluid contents of the bowells had been effused into the peritoneal cavity. All of the ulcers were probably of chronic duration; there were no sig=

of acute inflammation around, nor of phlegmonic recently occurring. The Mesenteric and lymphatic glands were also enlarged, and degenerated.

Case 2nd. Elizabeth Collins aged twenty eight years was admitted into the Baltimore Alms-house in July 1827.

When this patient was admitted, the lower half of the nose, the upper lip, & about half of the cheeks, were overspread by a dense pustular eruption, exhibiting distinctly the characteristic marks of Ecthyma Cachecticum. The nose & adjacent part of the cheeks were encrusted with scales so accumulated as to appear at a little distance as if the parts were covered by one extensive crust, but upon a more minute examination the scales were found seated on different basis. For some distance ~~partaking of the principal eruption~~ around the nose, lips & cheeks, there were pinguline, or solitary pustules, & incrustations, bearing the distinctive features of the principal eruption. The true character of the local affection in the present case might be easily recognised by its obvious analogy with the first case; but to obviate all doubt as to the nature of the disorder, the forehead, temples & upper part of the patients face, shewed the peculiar vestiges of the Ecthymatous pustulation, too plainly to be mistaken, or overlooked. All the parts just mentioned were indented by scars (very whose

in contact) of the singular contexture & complexion, which be
=gs as far as I can trace exclusively to Ethymatous dege
degenerations of the skin. The indentations were deep, puckered
of the ash grey colour. There were neither present pustules, nor
any vestiges of former eruption (of this character) on the neck
trunk, or extremities; so that the eruptive, or pustular form
the disease, had confined itself in this woman's case, within
the limits of the forehead and face.

The account given by the patient of the appearance, a
progress of the eruption, was as follows. About three years
before while residing in Baltimore, without any previous
constitutional indisposition, she was affected by an erup
ion on the temples, near the edge of the hair, which exten
=ded over the forehead & down the temples in front of the ear
Over all this surface the eruption was full & close, the pustules
becoming large and elevated by accumulating of matter
forming the crusts. From the forehead, the eruption passed
down the nose, and invaded the upper lip, & part of the ch
=ks, but concentrated chiefly on the bulb & ala nasi, so
it now appeared in a very dense and conglomerated charac

The patient's general health was (at the time of admiss
much impaired, there was considerable emaciation & debility
with pain in her limbs, & suppression of the menstruous func
=tion. The tongue, was fissured and brown in the centre, &

edges red, smooth, and polished, with patches of lymph scattered over its surface. The appetite parallels, alvine discharges mucous clay, generally thin, somewhat mucous & at times assuming a dysenteric character. The patients skin was dry and harsh, pulse small and wiry, & the temperature rather above the natural standard.

Treatment. This patient was ordered the decoction, (or Tisan of Sinach (see formula in the first case) with small doses of Plummers pill and opium at night, & her diet regulated according to the indications. She continued this course regularly for six weeks (except that the Calomel was thrown out of the night dose after the mouth became slightly touched) and at the end of that period the eruption on the nose & cheeks &c, had declined so much as to be confined to a few fading pustules. In a few weeks longer the eruption wholly disappeared leaving behind however its characteristic vestiges.

Notwithstanding the disappearance of the eruption this patient kept the Hospital, and generally her bed, complaining of Rheumatic pains, with some tendency to irritation of the bowels. Her general state however was a good deal improved, there was seldom any disposition to fever, & the tongue looked for the most part clean, and healthy. She was directed a few ozs daily of a bitter infusion (Cinchona & Gentian in aqua Calcis) and her diet prescribed.

About the middle of October our attention was called to this patient on account of illness of somewhat sudden occurence. She was found labouring under symptoms of acute enteritis, with great dysenteric irritation of the bowells. The abdomen was in some degree tympanitic, & so tender as to be incapable of bearing the slightest pressure, even the weight of the bed clothes, so oppressive, and for this reason the as well as to relax the abdominal muscles, the patient lay on the back, with the lower limbs drawn up. She was ~~[illegible]~~ hard fever, with a quick small pulse, and frequent passages of mucus and blood. She was treated promptly & carefully by all the means apparently best calculated to overcome the concentrated irritation which was displayed in the intestinal & peritoneal structures. Bloodletting was omitted because from her very languid state, she was thought incapable of bearing a loss of blood sufficiently to make sensible impression on the parts affected. Her chief efforts were directed to quiet the bowells & restore fully secreting function of the skin. Fomentations of the abdomen were directed to aid both these objects, as well as allay pain and tension. The medicines exhibited were a combination of Calomel, Ipecacuan, & Opium, in doses adapted to circumstances. Under this treatment the most urgent symptoms were in a few days subdued, & the immediate danger averted. The structures affected by the attack however

never entirely recovered; the bowells were very unsteady in their office, producing mucus & sometimes bloody excretions, and remaining very sensitive to pressure; symptoms indicating that Gastro-intestinal irritation still existed in the subacute form. In this state the patient linguered for many weeks (during part of which time all medicines were omitted at her own request) and gradually sunk exhausted about the middle of November.

An examination of the abdominal cavity and viscera was made after death, at which I was not present. The morbid signs reported to have been observed were chiefly those of deep inflammatory colouring of the peritoneum & viscera generally, but especially of the small intestines; together with numerous patches of effusion & exudation, over the surface of the viscera, & peritoneal membrane. In the lower part of the abdominal cavity a large mass of sanguineo-gelatinous extravasation was remarked, but whether from the part peritoneal surface, or from the bowells was not discovered. The interior of the bowells was not examined, and it was therefore uncertain whether there existed ulcerations of the mucous coat of the intestines in the last case, as have been so remarkably the fact in the first instance reported.

In presenting the history of the two preceading cases

I am fully aware, that from defects of knowledge & inexperie
in professional writing I may have failed to draw up th
reports in the best form, & may also have fallen into error
interpreting the pathological character, or indications of
treatment derived from the symptoms. My incompetenc
fallibility, will be readily pardoned by the enlightened
liberal Body, to whose judgement I have the honour to s
=mit this communication. I instruct themselves to avoid
=neous conclusions; by a wide range of observation, & hab
careful enquiry, and cautious inductions, they are prepared
excuse the mistakes of those, to whom all is new, and many
things obscure, and embarrassing.

The skin is the seat of many forms of disease, which req
=quent observation & familiar acquaintance, for their a
=rate diagnosis, and correct discrimination. It is only b
careful & practised examination of the form, & character,
habits (if I may so speak) of eruptive disorders that they c
be correctly classed, or made to represent those constitutional
states, of which they are the signs and consequences. It has
been complained that this part of pathological science is
uncultivated, and peculiarly imperfect. The numerous &
interesting forms of cutaneous affections have not been descr
=ed in a manner calculated to distinguish their individual
character, nor to illustrate the nature & causes of each. I

this reason the curative means and causes of by which these affections are generally addressed, are formed on a scheme of experiment, neither prompted by any obvious fitness, nor regulated by any constant principle.

The cases I have related will be readily recognised as the "Ecthyma Cachecticum," of writers on cutaneous diseases, from the manifest similarity of their symptoms, with the characters of that disorder as described by those writers. In some respects those cases present very obvious features not included in the account of Ecthyma Cachecticum, as given by Willan, Bateman, & others. I know not how to account for this discrepancy, except it be referred to some peculiarity of constitution, or circumstances in those individuals to (or in) whom the differing symptoms occured — or else that we suppose those symptoms to belong to a period, & state of the eruptive disorder, more advanced & matured than it had attained in the examples from which the descriptions of Willan, Bateman &c. were taken. The most remarkable diversity of the cases I have reported, from those described by the authorities referred to consists in the spots of a pearl, or ash grey colour, left by the desquamation of the pustules; spots of various dimensions, resembling in some respects the cicatrices of burns; but still more nearly allied in appearance to magnified pits of small pox. As those spots of discoloration

and altered texture of the skin, occured in both the cases, who came under my observation; & very distinctly also in the case related by Doctr. Henson. I am not disposed to consider them as purely accidental, but rather as proper to the disease, marking a certain period, or state of its progress and maturity.

By the writers on this disease, febrile symptoms are said to attend the first period of eruption. The patients in these cases I have described had been long labouring under the affection, before they were presented to my notice; & they cannot know the manner in which the disease first made its incursion. Some degree of fever accompanied the progress of the disorder through its eruptive stages, (after the admission of the patients) - with languor, dejection of spirits, & prostration of strength. The digestive organs were likewise much impaired in function; although the appetite was sometimes keen the state of the bowells & the character of the discharges were evidences of much gastric derangement.

The enlargement of the Cervical & inguinal glands, in one of the cases were signs of a depraved condition of the general habit; and perhaps the state of the latter might seem to justify suspision of a Syphilitic taint. But independent of the fact both acute & chronic enlargement of the inguinal glands may depend on causes of irritation, or vice of the c

=stitution, other than those of Syphilitic origin, non of the other symptoms in the case, concured to strengthen the presumption of Venereal taint. Besides, the declaration of the patient himself, (who, was a sober well behaved man) was entitled to some credit. Frequent enquiry was made, & inducements were offered him, well calculated to cause him to disclose the fact, if he had ever been the subject of Syphilis; to all which he uniformly denied that he ever had Syphilis, or any local affection however slight, upon the parts of generation. The Subject of the second case acknowledged that she had some affection of the sexual organs, (of what character she could not satisfactorily describe) about 8 years previous: but that was not at the time of her admission, any marks of secondary, or constitutional Syphilis, on any part of the system.

The secondary forms of Lues are extremely equivocal & the many discussions on the subject, have not cleared the question of much difficulty & embarassment. There may remain some doubt whether the Ecthymatous affections are not sometimes derived from a Syphilitic source, though Willan and Bateman expressly deny them such an origin, & assert that mercury is not at all an essential mean of treatment. My own (limited) experience & observation, would lead me to concur in the views of those Gentlemen both as to the exis=
=tence of the disorder independent of Venereal contami=
=nation.

and in relation to the absence of any demand for mercu
treatment, other than on the general ground of its influe
in promoting the secreting and excreting functions.

It is probable that all the forms of Ecthyma, are the resu
of certain states of constitutional disorder, and are to b
regarded as essentially symptomatic affections. At the
same time there is a regularity and distinctness of cha
-acter, in the appearance, course, and consequences of the
Ecthymatous pustular disease, almost, if not entirely pecu
to itself, and to be found in few if any other cutaneo
disordered states, not of specific derivation. This circumst
-nce would seem to imply particular relation to some
predominant set, or train of functional derangement
but of what organs, or through what peculiar kinds of
association cannot be satisfactorily traced.

The predisposing causes of that particular state of the syst
on which Ecthyma is ultimately engrafted, are involv
in obscurity; no agents appearing in any of the cases o
record, other than those which are constantly in actio
to which thousands are exposed & which only seem
capable of producing either some of the acute forms of
disease, or gradually to subdue the energies of the constitu
-tion to a state of chronic and common debility. The
injurious agents to which the subjects of Ecthyma

Cachecticum acknowledged themselves to have been exposed more the common elementary influences of heat, cold, & wet; and to laborious and fatiguing employments. To those causes of impression on health thousands (as was before remarked) are constantly exposed, and from those causes, many suffer in various modes; - yet Ecthyma Cachecticum, if so rare a form of disease as to have been seldom seen.

It is not more easy to determine the excitement=ing than the predisposing causes of the disorder in question. In two out of the only three cases of which I have any knowlege, the characteristic eruption appeared at a mo=ment, when the subjects of it were in (as far as they knew) their usual state of health, and had not done or suffered any thing to which they could refer as the occasion of the eruption.

It would seem probable that in this, as in most other of the protean family of cutaneous diseases, the first elaborating and stimulating organs undergo the first changes of state and function, & by their primary importance, and omnipresent relations, set on foot the morbid movements. The symptoms that precede, or accompany the open, or apparent external form of the disease, demonstrate its connexion with a more, or

less intense degree of Gastro-~~xxxx xxxx~~intestinal derange
such as feverous irritation, foul tongue, tender, a te
-id belly, Diarrhea, and emaciation. The apparatus o
digestion may be regarded, in one sense, as the throne
(to use the language of a distinguished Teacher of our
country) or fountain of vital power "Languendo pente
=culus omnia languent." The first act in the process o
nutrition being weakened, or disturbed, will extend
its influence to all the instruments subservient to the pe
=rfection of the process. The remotest parts sympathise with the
morbid condition of the assimulating organs, and per
in proportion of the functions, or textures of the system, do n
find the marks of sympathetic alliance so fully dis
=played, as in the reciprocal influence of the cellulo
structures, & the common integuments; each devoting sup
the other some effects of the impression made by morbi
agents upon either. It happens also in the course of diseases
calculated to break down the tone of the general sy
that parts most remote from the centres of circulat
and vital energy, & parts endowed with less perfect
organisation, & the lowest faculties of life, will be
least capable of sustaining their integrity of structure &
office, and least able to resist the tendency to decay, or
degeneration. The various & extensive dissipations of

of the skin consequent on many Cachectic states, evinces its liability to become the depository of disorders prevailing in the general system.

If the pathological views I have proposed be well founded, in relation to cutaneous affections generally, as well as of the particular degenerations of that structure, the consideration of which constituted the main purpose of this Essay, it results that the curative indication contemplates the removal (as far as possible) of all causes, that may have originally produced, or which tend to perpetuate a debilitated, or cachectic state of the system. Next to the removal of hurtful agents, as far as they are known, or can be avoided; such means must be brought into use, as seem qualified to correct those errors, into which the system has been already forced by their operation.

In accordance with the pathological data suggested, these means must be directed chiefly to the regulation of the Gastric functions. This indication is of paramount importance, and often of difficult accomplishment; we have to quiet and allay irritations, relieve congestive embarrassments & restore to a natural state secretions, that have been suspended, or changed. It is obvious that in consulting these intentions we must avoid the use of

agents calculated to give disturbence to the general system
There is in those forms of disorder, a manifest degree of
phlogosis, a sub-acute inflammatory affection of the
Gastro-enteritic organisations with a tendency to the ba
termunations of chronic irritation in those structures.

The proper regulation of the diet is also an important
means of treatment. It should be bland and nutrit
nourishing; abounding in alimentary matter easily ass
=ilated, with few qualities to irritate, or offend. The
temperature and purity of the air, in which patients
abide, are likewise considerations of moment, as are al
their personal comfort, in the articles of clothes, bedcl

If the medicinal agents addressed to such cases t
=gether with the collateral means employed to give them
cia, and efficiency, the important functions of the Chy
opoetic organs, the elaborating, nutrient, and excreting op
can be brought into a natural train, then has arrived
the proper occasion to interpose as auxiliaries. Tonic
Medicines, a more generous regimen, and exercise, adap
to the state and strenght of the Patient.

Finis.

Dissertation on Hepatitis.

Respectfully Submitted

To the Provost, Trustees,

And

Medical Faculty,

Of

The University of Maryland.

By

Junius C. Dunbibin,

Of

Wilmington, North Carolina.

Preface.

As the knowledge of the medical student is derived in general from the experience of Authors, unassisted by clinical observation originality is scarcely ~~is scarcely~~ to be expected in his dissertation. As his remarks must then be but a recapitulation of what may be found in the works of every writer, were he to trace in minute detail all the aspects a disease may assume under modified circumstances, the reader would experience a tedium ere its conclusion. In the following pages therefore I will concisely describe those features which characterize Hepatitis in its most usual appearances.

Hepatites.

From the important function which the Liver has to perform in the animal economy; from its extensive nervous communication & topical relations, we are prepared to find it not only frequently disarrayed itself, but extensively involving other organs in its action of disease. From its contact with the stomach & their partial supply of nerves from the same source, the latter organ will often assume a sympathy of action. From its contact with the Diaphragm & proximity to the Lungs, these may become secondarily involved. As the intestines repose partly in contact with its concavity & receive from it their stimulus to contraction, therefore depending upon it for their healthy action, these must become irregular in their function.

Pathologists make two divisions of the structure of the liver, the membranous, & parenchymatous, of essential importance as the one or the other becomes the seat of disease. Cullen denominated disease of the first, acute; of the last, chronic Hepatitis. But writers of more modern date attribute to each both forms of this disease.

Causes.— Heat should be mentioned as the most frequent cause, by producing indirect debility & irritability & thus predisposing to the disease upon the application of any exciting

cause. Hence the disease most frequently makes its appearance in autumn, from the action of cold upon a system which has been exposed to the influence of the heat of summer. Among its most prominent causes, may be enumerated miasma, intemperance in eating, particularly in drinking, external violence as from blows, violent exercise, biliary calculi.

Symptoms. It generally makes its appearance with chilliness, succeeded by synocha; pain extending from the right hypochondrium to the precordia, increased upon pressure of the epigastrium, pain in the right shoulder arising from nervous communication: pulse hard & quick, tongue dry & white sometimes brown, respiration hurried, skin hot & dry. Sometimes an increased action being imparted to the secreting vessels, bile will be poured out in profuse quantities, & vomiting & purging of biliary matter will take place. At other times, by the inflammatory action extending to the ducts, causing adhesion of their sides, or they being obstructed by inspissated bile, constipation is manifested. Sometimes even in this state of their impermeability, from the intestines being deprived of their natural stimulus to contraction, the feces are retained, their fluid part become absorbed & scybala are formed, which from their irritation excite an action in the mucous surface & diarrhea or dysentery & habitually a concomitant symptom.

Should a spasmodic affection of an intermittent type unattended with with fever, have preceded, two or three days, the more immediate symptoms of Hepatitis, we may attribute its origin to biliary calculi. Besides the general symptoms denoting the derangement of this viscus, others have been enumerated as giving character to it according to its different points of location. When, for instance the disease is rapid in its progress & the symptoms are highly inflammatory in aspect, the membranes are said to be implicated in the disease. The parenchyma on the other hand, if alone affected will evince symptoms of milder aspect & more gradual development. If the membrane covering the convexity of the liver, or the convex portion itself implicating the membranous structure be its location, the pain is insupportable & of a dragging sensation when sitting up or lying on the left side, in consequence of the ligaments over which the peritoneum is reflected being now stretched by the dependency of the liver. If again the concave portion of the viscus involving the concave membrane be the part affected, though the symptoms may demonstrate an equivalent degree of inflammation, there will not be the same increase of pain as before on rising, nor the affection of the lungs to the same extent. the stomach evinces a greater participancy & nausea & extensive vomiting are attendant.

When there has been a slower developement of the disease, commencing with tension of the right hypochondrium, dull & obtuse pain pulse more full active & firm. Such have been regarded by authors as evincive of a pure parenchymatous affection. The yellow tinge of the countenance & clay-colored evacuations arising in the first from the absorption of bile, in the second, its retention from the primæ viæ, sometimes appear in the former, but more frequently in this form of the disease.

Chronic Hepatitis is often so gradual in its advancement, that the symptoms are for weeks & probably months disregarded. When there is a sympathy of the lungs, the cough & difficulty of breathing may so preponderate over the more characteristic symptoms & that the patient refers to the lungs the seat of the disease. Sometimes indigestion, dyspepsia, diarrhea & dysentery are but disguises, in which it makes its appearance.

It will however more generally commence with a dull pain & sense of weight in the right hypochondrium, with pain of the right shoulder, restlessness, depressed spirits. If the lungs be distended by a full inspiration & the liver thus projected below the margin of the ribs, its rounded edge may be felt hard & tumid & pressure on the part will cause a more generally diffused pain, than that which characterises the disease.

The brain evinces a sympathy, by a heaviness of feeling, which in many instances will not amount to a headach. The adnata & skin assume a dark yellowish hue from the absorption of bile. The tongue is dry & brown sometimes white. There will be a bitter taste in the mouth particularly in the morning. The skin dry hard & constricted is one of the most frequently attendant characteristics of the chronic form of this disease. Dejections are generally of a clay color, sometimes a diarrhea or dysentery will be present.

In the progress of the disease febrile paroxysms manifest themselves towards evening with a burning sensation of the palms of the hands & soles of the feet; finally leucophlegmasia & edema.

Causes. This disease is frequently the sequel of intermittent & remittent fevers & may arise from the continued application of any of those causes producing acute Hepatitis. This may particularly be remarked of Miasma. The sallow & jaundiced aspect of those, who inhabit marshy districts is sufficient evidence of its action upon this viscus & doubtless the frequent occurrence of diarrheal & dysenteric affections may be attributed to the same cause. By this agent the liver, being kept in a continued state of sub-excitement is liable to the disease upon the supervention of any exciting cause. It has been averred that miasma is more disposed to manifest its effects upon the system in the chronic than the acute form of this disease.

This no doubt may be true with regard to the inhabitants of a miasmatic section of country, it not being able to produce in those accustomed to its influence so great a degree of excitement, but in an individual from a more elevated region & of sanguineous temperament it will be most likely to assume (if it show its effects in Hepatitis) the acute form of the disease. Opium-eaters are likewise subject to the derangement of this viscus: but probably a majority of the cases which occur may be referred to the intemperate use of ardent spirits. When we consider the probable specific action of these substances on this organ, in vitiating the secretions, the atony which they indirectly induce, thus disposing to venous congestion, we would a priori expect to find it prominent among its causes.

Acute Hepatitis may terminate in resolution, suppuration, scirrhus, or mortification. Its termination in resolution may be preceded by a hemorrhage from the nose or hemorrhoidal vessels or an increased secretion from the mucous surface of the intestines. Such a termination may be recognized by a departure of pyrexial symptoms, restoration of the secretions to the surface, ejection of natural feces & the complexion assuming the natural aspect.

If it end in suppuration the pain which may before acute, becomes moderate & of a throbing sensation: the ~~pain~~ weight in the right hypochondrium is much increased, & the experiences severe rigors

& flushings of the cheeks. Should during the inflammation lymph have been effused producing adhesions to the abdominal parietes, the pus may travel this direction, point externally, & thus is produced a healthful termination of the disease. Again if an attachment be formed to the diaphragm & lungs, it may be evacuated into the air-cells, & if the quantity be small, discharged by expectoration; but if considerable the air cells are engorged with pus, & the patient dies of suffocation. Should the lungs however not partake in the adhesion the pus may be discharged into the sac of the pleura & give rise to inflammation or empyema. Or an adhesion being established between the liver & intestines, it may here find its exit. Again it may traverse to the biliary duct, be poured into the intestinal tube & evacuated per anum. But if as has sometimes been the case the purulent contents are discharged into the peritoneal sac, art being debared its assistance, death results from peritoneal inflammation. Scirrhus acknowledges its presence by a torpor in the functions of the organ, with a hardness of its substance, attended with deep lancinating pains. But when there is a sudden subsidence of all pain, a breaking out of a cold sweat, coldness of the extremities & a gradual diminution of the pulse, we regard them as the fatal symptoms of mortification.

Post mortem examinations have demonstrated to researchers a variety of appearances

When the disease has been of the acute species, infarction, suppuration, & ~~ulc~~ mor=
=tification ~~fixation~~ have most commonly presented themselves. The pus may be con=
=tained in one cavity or distributed in small abscesses throughout the gen=
=eral mass of the organ. Adhesions may be formed to vicinal parts.
Calculi may be found in the biliary ducts.

The following appearances most usually occur after the chronic
form of the disease, yet not exclusively so, & some of those above-mentioned
may occasionally be demonstrated in post mortem examinations of
the chronic species. The liver, of a pale or yellow ash color; tubercles
developed in its structure, with a deposition varying from a cartilagi=
=nous to a caseous consistency; tumefaction at one time to such an ex=
=tent, that all the contiguous organs are forced from their natural
relations; at other times, contraction & hardening of its substance.
Both of the last conditions may give rise to the hydroptic ~~appear~~ develope=
=ments ~~ances~~ mentioned above as symptomatic of the chronic form of
the disease. In the first, from the removal of the blood produced by
the pressure of the enlarged viscera upon the cava ascendens
the vessels of the lower extremities are over-distended & serous effusion
take place, first appearing in the lowest parts (the vessels being here weakest) & gradually ascending.
As some of the branches of the cava take their origin in the pel=
=vic cavity ascites may succeed ædema of the extremities.

In the hardened & contracted condition of the organ, there must

take place a proportional diminution of the volumes of fluid, which takes its course through the Portal circulation. The tributaries of the Venal Porta derive their origin from the peritoneum & other contents of the abdomen, an inordinate distention in them must necessarily occur, & an effusion into the sac will be the unavoidable consequence. In the distention then of the liver, the first hydropic appearance is, Anasarca; in its contraction, Ascites.

Treatment. As acute Hepatitis may assume any shade of intensity of action from that which characterises inflammation of the dense membranes to that of parenchyma, our remedies should partake of as many degrees of modification.

The primary indications are to diminish the force of arterial action & relieve the congestion of the part. If the symptoms are urgent towards a crisis a speedy impression is to be made upon the system by immediate & profuse venesection, to be repeated at short intervals, & as often as the indications demand. Generally however it is less rapid in its progress; & should the disease arise from heat or miasma, in consequence of the debility generally attendant, Venesection is less imperiously demanded & we should resort more early to the administrations of mercury. We should be certain however to extend our bloodletting sufficiently far, as mercury will then more speedily disseminate its influence through the system, & we avert that train of diseases which are prone to supervene

as the sequela of this affection. — If in an active commencement of Hepatitis, there be constipation of the prima viæ, they should be rendered soluble by enemata or mild cathartics; as drastic purgatives would be but an aggravation to the disease. But if there be less action of the heart, & more congestion, mercurial cathartics may be benefited

After a subduction of inflammatory symptoms, Calomel may succeed to restore the secretion of bile if that has been rescinded or if too profuse & vitiated to restore it to its natural quantity & character.

Generally the disease will yield to the remedies that have been prescribed, & tonics will restore health to the patient. If however it be more obstinate in its character, mercury given to the extent of ptyalism will produce a solution of the disease. During the administration of calomel ~~Light~~ mild purgatives should be given to keep the bowels soluble. A blister may be applied to relieve any remnant of pain.

In the treatment of chronic hepatitis, general bloodletting is sometimes but not often demanded, cupping & leeching being generally sufficient to answer this indication. In this form of the disease we may make an early recurrence to the Sub-muriate of mercury: & to avert the dry & harsh feeling of the skin & allay the activity of the circulation, tartarized antimony forms a valuable article of combination. It has been recommended by some writers not to produce speedy & active ptyalism in this disease, affirming that the greatest advan-

=tage obtained from this remedy consists in a regular & prolonged con=
=tinuance of its use. We should probably coincide with this opinion
when we reflect upon the proneness of this disease to return & regain
the use of mercury after all the symptoms had once subsided, To insure
the complete cure then we would according to the recommendation
of eastern writers persevere in the regular but not active use of
this remedy until the system should acknowledge its influence
in slight soreness of the gums. Let it now be intermitted, until
a subsidence of the affection of the gums & again resumed.

If a diarrhea or dysentery should be an attendant, ipecacuan=
=ha & opium will form valuable adjuncts to the mercury. Either of
the diseases will subside when the gums become affected. If
there is a tendency to obstipation, a mild cathartic should
occasionally
~~generally~~ be given. Should the long perseverance in the internal
use of calomel produce dyspeptic symptoms as it sometimes does
friction with the unguentum hydrargyri in the right hypochon=
=driac & inguinal regions may answer its substitute. If pain
should exist blisters are serviceable. If debility be present the system
should be supported by tonics
astringents & opium until the mercury produces
its effects. Nitric Acid has been highly extolled by East India prac=
=titioners; probably it affords us a valuable remedy where from
particular circumstances an intermission in the use of mercury
becomes essential. In strumous
~~scrofulous~~ habits where the usual remedy

would be highly prejudicial, the nitric acid may be given with much advantage not only for the relief of the ~~scorbutic~~ hepatic affection, but also an amendment of the scorbutic tendency. — The nitro-muriatic Acid bath was recommended a few years ago by a Dr. Scott & has since received the commendation of many practitioners. Dr S. remarks that where mercury is injurious from delicacy of constitution or idiosyncrasy, the nitro-muriatic acid may be employed with safety & advantage. Nitric & Muriatic acid each ℥iv Water ℥viii are poured together. One ounce of this mixture to a gallon of water forms a bath of medium strength. The feet & legs are to be immersed in this at the temperature of 96° for the space of fifteen or twenty minutes, just previous to going to bed. Mr Annesley speaks in the highest terms of the use of ~~this remedy~~ the nitro-muriatic acid as a poultice in torpor of the liver, where its structure is enlarged or the biliary secretions disordered.

After these remedies have been successful in eradicating the disease Nitric Acid is the best tonic by which the system is to be restored to its healthy standard. Particular attention to diet must be observed by the patient & only those articles used which are ~~all~~ light nutritive & easy of digestion; And as much as possible is to be avoided the influence of such causes as give origin to the disease.

— Finis —

An inaugural dissertation

On the

nature and operation of Kine Pox

submitted to the examination

of the

Provost Trustees and Medical Faculty

Of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Philip Hepburt of Frederick County Md

The deleterious influence exerted by Small Pox at present and the many unpleasant circumstances growing out of its existence, calculated to excite a desire to mitigate the severity and if possible the progress of a disease, so destructive in its ravages, has induced me to take up the consideration of the subject — I cannot however in justification of this attempt plead, ignorance, of the mystery in which it is involved, nor can I plead ability, to meet the many difficulties presented; but must urge in lieu of the above, my ardent desire, to see disarmed of its power, a disease that has slain its thousands rendered hideous the most beautiful and spread dismay and horror wherever it has visited —

No doubt it is presumptious in me to undertake the investigation of a subject, that has been pur-

led by in silence, and viewed as inexplicable by some of the brightest luminaries in the medical firmament, and with whom, in comparison I would be as a mole hill to a mountain; yet conscious of the above and as it were to heighten my folly I have embarked in the subject, and must endeavour to render excusable my attempt, by holding out the idea that the race is not always to the swift, nor the battle to the strong —

Not having a knowledge of the different treatises on this subject, and being entirely destitute of illustration and experience I shall of course be under the necessity of availing myself of analogical reasoning. In viewing the anatomy of man and inferior animals, your attention is immediately drawn to the analogy existing between them, this becoming more and more apparent as you ascend in the scale

; it is sufficient for our purpose to be aware of this analogy, without endeavouring (were I competent) to point out in what it consists; by means of this resemblance the Physiologist has been enabled to ascertain with more certainty, the function of different organs, and the Science enriched with some important discoveries: in like manner of this analogy in organization and the discoveries that have resulted from a knowledge of it, we should suppose that the disease to which they are incident would be somewhat similar; and that from this analogy in diseases (if such be the case) we may be enabled to draw some important conclusion respecting the nature and origin of disease; without endeavouring to prove that there is an analogy in the disease, we will assume that Kine Pox is a species of Variola differing only in kind incident to the Cow, in corroboration of which

some observation will be made after having considered the disease to be prevented and endeavoured to account for the singular fact of it occuring but once to the same individual: to do which the nature of the predisposing cause should be ascertained- this by some is said to be the bile, making it both the predisposing and exciting cause, against which the following militate— it is generally admitted that any cause capable of being considered separately from the system, operate primarily on the nervous system it soon becoming insensible to its operation, unless it be by a long continuance rendering it so through habit, but again resuming its sensibility by a suspension of its operation: if such be the case the disease would occur repeatedly: but further if the bile was the predisposing cause, we should expect to be able to communicate a mild or an aggra-

rated form of disease at pleasure; for as a weak or attenuated form of Malaria produces a mild Intermitting, and a more concentrated one an aggravated disease, such as Yellow Fever so by inserting a small quantity of virus, a mild, and by a larger quantity, a more malignant type could be produced; which is not the case, for the disease however small the quantity has been aggravated, and these Atmospherical causes are made the predisposing causes by others; against which the following may be urged-; diseases which are known indubitably to originate from these causes are not contagious, and always have a tendency to recur when ever the cause operates: What I understand by atmospherical causes, are long continued saturation of the air with moisture, sudden elevation and depression of temperature, and any production of which

the air is an agent in producing, and for which it is the medium of communication; for instance Malaria &c; the diseases arising from those causes are known to obey certain laws, which are incompatible with the nature of Variola; for instance Intermitting, Remitting, and Yellow Fevers commence in warm weather, in consequence of its promoting Vegetable decomposition and disappearing at the approach of cold, owing to it retarding that process; the same principle may be extended to other diseases arising from those causes; Variola on the contrary, is not influenced in this manner but will appear at [illegible] season climate and place; in short if the disease originate from those causes, why is not Typhus & Yellow Fevers contagious, or why is the System susceptible of those diseases more than once, for it is difficult to conceive that atmospherical causes cause

influence the System, as to render it forever after insensible to its operation, without at the same time extending this principle to those diseases in general: but it may be asked why is the system put under the influence of Mercury previous to inoculation, or what predisposes the System if it does not originate from any of those causes: in answer to the first I presume it is not by preventing the virus from acting by predisposing to the disease, but rather by restoring the equilibrium of the System and placing it in that condition, inimical to a disease of high action, or one of debility, to the other question the possibility of a constitutional predisposition may be urged, this being the only conclusion (provided the foregoing can be established) that we are predisposed from our first existence to the disease, and to which we would be subject though the cause generated

in the best labouring circumstances as to be not to pre-
dispose to disease, this predisposition being so strong upon
as to be excited by a contaminated atmosphere, approa-
aching in its operation to virus, of which there are
instances of the disease manifesting itself, without
the person having been exposed to the contagion; in
others the predisposition so slight, as not to be ex-
cited by the most concentrated contagion, or if ex-
cited the action and external effects so trivial
as not as not to have drawn the attention of the person
effected; but in objection to this constitutional
predisposition may be urged the time at which the
disease first appeared, and the exemption of com-
munication at certain periods — as respect the first not
any thing satisfactory can be ascertained, and the
many different accounts given of it, would lead us
rather to suppose that the disease existed some time more-

moral; if certain nations were exempt from the disease, it may have been owing to their customs and habits being incompatible with the generation of an existing cause—

After having advanced some reasons for supposing that the virus is not the predisposing cause, but that we are constitutionally predisposed, and having assumed that Kine Pox is a species of Variolæ differing in kind, incident to the Cow; we shall proceed to offer a few remarks respecting the operation of Vaccine Virus; or, like the inoculation of one species of fruit, on the same species though differing kind, the fruit of the former is produced though the latter is the support — is inoculated on a Small Pox predisposition, call it into action Vaccine Virus is produced, and consequently the predisposition in part or wholly destroyed but it is

asserted that Variolus matter will not produce Small Pox in the Cow, then the pock will not be precisely similar to the pock on man; nor is the Cow pock on the latter precisely similar to that on former, for there is a physical difference in the seat of the pock, but we should suppose reasoning a priori that each would communicate its kind; again it is asserted that they are of the same species and kind, only modified by its communication with the Cow, if such be the fact, we should suppose that the genuine disease would appear, when again communicated to the human system for observ- would lead us to believe, that a disease modified retaining the power of communicating disease will produce the genuine disease in another person by withholding the cause of modification - for instance Variolid is a modified disease yet it pro-

duces the genuine disease, when communicated previous to vaccination; in like manner we should suppose vaccination to operate, but it is not the case for it invariably maintains the same character, which I think favours the idea that they differ in kind—

That it is a species of small pox is sufficiently proved by it exempting the system from an attack of the latter, for what disease can effect this if it be not of the same species— you may with as much correctness assert, that you can successfully inoculate one species of pimple on an entirely different species as to suppose that a disease different from variola can destroy the susceptibility to the disease—

If the preceding can be established the following conclusions may be drawn—

First— that vaccination is a prophylactic, or antidote

the person be operated on, until it loses its effect.
When this is once effected the impression will never be
eradicated, and the person who before would suffer from
the disease, as though it were a Protean, may now, or
or regardless of the formidable and threatening aspect
of the disease and his defiance to the most concentra-
ted contagion: It may be necessary however to re-
mark that in order to effect the above the state of
the system should be taken into consideration, all dis-
ease removed removed, and the system placed in its
most susceptible condition, for the virus of Kine Pox
though somewhat similar in its operation to that of
Small Pox, is not so energetic in its action and conse-
quently more easily counteracted-
Secondly- that we are constitutionally predisposed
to all general contagious diseases, and this predispos-
could be called into action by the virus obtained from

an animal laboring under a corresponding dis=
ease, provided the disease could be ascertained, and the
virus procured sufficiently concentrated.
Thirdly - the nearer the animal approaches in or=
ganization to man, the nearer the disease approaches
in kind, consequently the more certainty there would
be of the virus calling the predisposition into ac=
tion and destroying it -

An

Inaugural Essay

On

The use of Emetics

Submitted to the examination

of

The Right Revd. James Kemp D.D. Provost

And

The Regents and Faculty

of

The University of Maryland

by

Robert Carvil Howard

of

Maryland

To

John Beale Davidge A.M. M.D.

Professor of Anatomy in the University

of Maryland, This Essay is dedicated

not as a memorial of its worth, but as a pect

for his exalted talents &c. The advantages

which I received from his great erudition

has induced me to dedicate it to him.

From

The Author,

On Emetics

It is not my intention in the following dissertation to enter extensively into the subject: nor to notice the different effects particular emetics. This would lead me into so wide a field for discussion that it would be impossible to do justice to the subject in the narrow limits of an inaugural dissertation. The remarks which I shall make are in reference principally to vomiting as induced by Ipecacuanha and Tartris antimonii. The order in which I shall discuss the subject will be (after endeavouring to impress on the mind of the reader the importance of this class of medicines) in the first place to consider the changes which take place in the different functions while a patient is under the effects of an Emetic. Secondly an enumeration of some of the diseases in which reasoning from the effect we should be inclined to recommend them: and lastly to make a few observations on their use in apoplexy, a disease in which their efficacy is doubted by many, supposed seriously injurious by some; and as highly extolled by others. A few observations will be sufficient to prove the value and importance of this class of medicines in the treatment of diseases, when we take into con-

e striking sympathy between the stomach and the brain, and
hrough the latter organ with the whole vital system, the imp-
tant functions carried on by those organs on which Emetics
mediately act, we cannot but infer the most decided
d effect from their judicious administration, and to
lace them among those medicinal agents which have the most
ended. influence and are of the most general application.
is this view of the subject which reason dictates invalidates
experience. Practical physicians of the first reputation
all climates, and in every age, since medicine has been cul-
ated as a science bearing their testimony to its truth.
the first place to proceed according to the order above mention-
en an Emetic is taken in a dose sufficiently large to excite
iting the first effect, nausea during this stage the pulse
weakened and consequently all those changes which are
endant on a weakened condition of the system are for a
ile experienced. The extreme vessels on the surface of the
dy become more or less relaxed; the brain receives its blood
e slowly; the whole vital system is temporarily depre-
d. In a time more or less short according to the dose
ken and the peculiar constitution of the individual,

e nausea is succeeded by a rejection of the contents of the
tomach, an inverted action of the stomach, and asophagus
kes place, the abdominal muscles and diaphragm are
own in a state of contraction, the Gall bladder, pancreas
l the other contents of the abdominal cavity are compressed
l their secretions thrown into the intestinal cavity. The
face from the exertion becomes more relaxed, the perspi-
tion stands in drops upon the face. The pulse is increased
frequency, and force and the blood returns with more
ficulty from the head. The secretion of the bronchial
nds is increased and dislodged. At first the contents of the stomach
e but in part discharged; should the dose be sufficiently large
l the vomiting continue the greater curvature is brought
to action, the secretions of the pancreas and liver are
red in increased quantities into the duodenum, from
nce into the Stomach, and finally are rejected along
the other contents. Should the dose be excessive and the
miting still continue, the extremities become cold, a
ammy sweat occupies the surface, the extremities are
ded with spasm, the circulation becomes weak and
ally death closes the scene —

condly_ Reasoning from the effects of vomiting which has
n just sketched out, it is apparent that Emetics must
serviceable by expelling from the stomach any deleter
s agent contained in it, and on this principle it is
eful in all those affections where the first passages
loaded with impurities and saburra, this is more or
the case in most continued fevers, in those of a typhoid
well as those of a remittent form, The action of the febrile
brile poison on the system is generally in operation many
ys before the fever manifests itself, the appetite diminishes
digestive process is enfeebled, and the stomach not
sparing the aliment in a fit state for its further assimil=
tion, it is often retained in an impure state and its
esence designated, by flatulency and acidities_ although
e symptoms are but the consequence of the febrile
son and not as the vulgar suppose the cause of
disease, still it must be manifest that their rejec=
must relieve the system from a great source
irritation_ Nature whose salutary exertions to
lieve the system from disease must strike every
servant Physician. points out the propriety of

e course and the success that attends it, removes all doubt
om the subject. In most other diseases where the stomach
foul as indicated by a foul tongue, bitter taste of the
uth, loss of appetite, and eructations, should not the state
the circulation, or any other circumstance forbid it, vomiting
ould be resorted to: on the same principle. When emetics
e used. For the purpose of unloading the stomach, they are
erally given in the first stage of the disease and are
dom repeated. This mode of practice though for the
st part proper, is often too rigidly adhered to. There
e stage of fever where the strength is sufficient to justify
e administration of a purgative where an emetic might
t be given with less hazard of inducing debility & tho
e state of the first passages require it, indeed I am convin
d that they are not enough used in the latter stages of
sease. Great stress is laid on the repeated use of purgatives
ring fever and much improvement has been effected in
e healing art by the introduction of their more frequent
e, but they are often used to the exclusion of emetics
n those latter remedies would afford most benefit. The
e symptoms requiring the use of Emetics in the primary

ge may develope themselves in the further progress of fever
d their use is just as imperiously demanded as in the first
stance. Besides those impurities which are the result of
rbid action, and for the removal of which we have just
commended vomiting, substances of a poisonous character
y be taken into the stomach, the immediate expulsion
which is of the utmost consequence It is true that most of those
bstances are of themselves Emetic and vomiting to an alarming
ent is ultimately produced by them, but to trust to their
ejection from their own action, is to trust to an imperf-
t agent whose operation is too slow, and whose effects for
e most part only become violent after the stomach has
ceived irreparable injury and the whole system brought
der their deadly effects. In all those cases where they are
en in time, the most quick and active Emetics should
promptly administered and vomiting along with
rious diluting draught to used to such an ecstent as
ring the greater curvature of the Stomach into full
tion. In noticing the effects of emetics on the different organs it
stated "that the secretions from the bronchial
ands were increased and dislodged" and it is from

ese particular effects that they constitute so valuable class of
edicines in catarrhal fever, Pertussis, Cynanche Trachealis, and
any cases of Peripneumonic inflammation. In all those diseases
cept in some cases where the violence of the inflammation
d the height of the fever render the use of the Lancet indispe-
sible, they are remedies of the first importance. In the three
st mentioned diseases, they often require to be given frequently
d particularly in Cynanche Trachealis, where the patients
e seems solely to depend on their almost constant exhibition
e other effects of vomiting are no less important. The diminished
rce of the circulation, the relaxed state of the skin, the violent
citation of the whole system must produce changes in the vital
conomy of the utmost importance in arresting the progress of
iseases and conducting them to a favourable termination—
t is from these latter effects that many physicians of the
st respectability have been inclined to think Emetics
en at the commencement of fever may arrest their further progress.
is opinion has been denied by others of equal eminence—with regar
t the former opinion, it may be urged in its favour that
e causes of fever act by first inducing a certain state of
disposition to fever from which a person may escape

thout further disease provided no exciting cause is applied to
duce it, as excessive fatigue, loss of rest, exposure to cold &c
in other words that there seems to be in the vital economy,
power to resist the invasion of disease to a certain extent,
l that this extent of this power depends on the action of
tain agents on the system; from this well established fact
practice they reasonably infer, that if a certain quantum
disease will pass off from temperance in eating and drink-
, care to avoid exposure to cold &c which would otherwise
minate in a long illness, favourable changes may likewise
induced by the action of remedies on the system—
on the trials made by Mr Currie of Liverpool concerning
cold affusion of water in fever, that sagacious physician
fully persuaded that the disease was frequently arrest
to primary stage, and even after the system was labour
under all the symptoms of a completely formed fever
course seemed often to be shortened by the sudden
earance of a complete crisis— On the other side it
stated that fevers run a certain course and exhibit
same train of symptoms in spite of the best directed
inistration of medicines, That when the poison of

call Pox, measles, or Scarlitina, has once brought the system
der the peculiar laws of either of those diseases that it
uselefs to look for health until those diseases have run
in regular course,—Did I think myself qualified to
cide on this controverted point, I certainly should
el inclined to coincide with the former. I do not
ink there is any analogy between those diseases of the order
exanthemata and ordinary cases of fever— Remedies certainly
ve the effect of preventing many cases of inflammatory disease
coming dangerous, a single bleeding, nay often an Emetic
the proper period will often strip an incipient Pneumo-
ia of all its danger and convert into a mild case of Catar-
al fever which without its timely administration would
ve turned out a dangerous Pleurisy— I would therefore in
st cases of fever at their commencement, provided no circums-
ce forbade their use, recommend Emetics with the view
ither cutting short the disease or so far weakening its force
to ensure a more speedy and favourable termination
I have thus in a cursory manner mentioned some of
e diseases in which reasoning from the effects of Emetics
should feel inclined to use them as remedies— We have

briefly treated the subject and many other diseases might
enumerated in which we may calculate on the same good
fects, but as they will readily suggest themselves from their
logy with those already mentioned, it is deemed useless to
rticularize them. —
ndly With regard to the employment of Emetics in
plesy much room is open for discussion. Sothergill with
ny other Physicians of eminence recommended and used
m, but the weight of more modern testimony is against
administration. I think the principle objections
inst them are drawn from theoretical views and founded
the obstruction to the return of venous blood from the
ad during the violent efforts produced by vomiting. It
not appear that as much mischief results from their
as might "a priori" be expected, Vomiting often take place
the sympathy existing between the brain and stomach,
d it has by its partizans been generally employed as the
valuable of remedies, yet I do not recollect to have
n or read of any well authenticated case where an
ravation of the apoplectic symptoms could be traced
it as a cause. Although vomiting is not often prescribed

physicians to persons who make and habit show a marked
predisposition to apoplexy, yet the remedy is frequently
employed by such persons of their own accord whenever they feel
indisposed, they invariably escape without receiving any injury
from its use. From these reasons, I would not dread any ill
effects from Emetics in certain cases of apoplexy. It is
true where the brain is much oppressed I would use the
Emetic particularly if the habit of the patient and
the circumstances induced me to suppose the cerebral
affection to be the "fons et origo" of the symptoms. But
in every case of apoplexy, I would keep an eye to the
stomach. In few would I reject vomiting, was the patient
not subject to Dyspepsia, and in most cases would
excite it (if practicable) could I trace the affection
to any fault of the stomach —

John Carroll Howard
Baltimore County
Maryland

An

Inaugural Dissertation

on

Rheumatalgia

Submitted for Examination

by

Henry M Robertson

of

Cambridge Maryland.

To Thomas Woodford Doctor of Medicine of Cambridge eastern Shore of Maryland, this inaugural dissertation is respectfully dedicated, as a testimony of respect and a mark of the gratitude that is due to him, from his affectionate pupil

Henry M Robertson

To Nathaniel Potter M.D. Professor of the theory and practice of Medicine, in the University of Maryland, this dissertation is also dedicated, as a testimony of the particular respect, entertained for him by the

Author.

Introduction.

It is with diffidence that I present to your consideration the present imperfect attempt towards investigating into a subject, which has so often served, for the exercise of very superior abilities, in a practical as well as theoretical point of view, and permit me to assure you, that nothing could have elicited the present attempt, but the incumbent duty, which the laws of your institution demand, with which, I cheerfully comply, when I consider it as fulfilling a duty, that I owe, to an institution, which at home, as well as abroad, has been so long acknowledged, as preeminently superior for its talents, and respectability, as well as being particularly gifted with the many facilities, of accurately diffusing scientific research, confirmed by practical precept,

With these few remarks I shall proceed to the further consideration of the subject, trusting to your generosities to excuse the many imperfections with which it may abound.

Rheumatalgia

The symptoms of this disease which first make their appearance, are, a sense of lassitude, attended with rigours, succeeded by heat, restlessness, anxiety, and thirst, attended with a quick and hard pulse, the blood when drawn presents the inflamatory crust on its surface, the tongue is of a white inflamatory appearance, which it often preserves in this disease throughout its different stages, and the skin instead of being hot harsh and dry, is commonly in a state of profuse pirspiration, and a remarkable acid odour is observed by Gregory, to arise from the secretions of the skin.

Soon after one or more, or the whole of these symptoms have made their appearance, the patient is seized with pains in different parts of his body, and more generally they are present in some of the large joints, as the shoulders, knees, or hip joints, and often the wrists, and ancles, are affected with this inflamation,

Although the pain is generally observed to be situated in the large joints, we not unfrequently find it pres=sent in the muscles, and consiquently we speak of rheumatism of the muscles of the leg, or thigh, as well as of the knee, or hip joints.

The muscles of the head, neck, and trunk, are likew=ise subject to this disease, producing when in the trunk, particularly if the intercostal muscles, or the heart be the seat of the disease, very alarming and danger=ous symptoms, and often death, if proper assistance is not promptly afforded to the patient;

Rheumatic pains, are much increased by the slightest motion, which requires the use of the muscles affected, and this might be considered, as among the best of the diagnostics of this affection,

The pain which affects rheumatics, is generally most severe in the night, especially soon after the patient gets comfortably warm in bed, and when inviting gratef=

=ful repose to his wearied limbs, he is unexpectedly raised
from his slumbers, by severe pains, which becoming
gradually more severe, after awhile abate in their violence,
and towards the morning, are succeeded by a gentle sweat,
but there is generally an exacerbation as the evening appr=
=oaches, the patient having remained tolerably easy
the preceeding part of the day, in other cases the remiss=
=ions are very imperfect, the disease being equally violent
throughout the day, as it had been, during the night.

After the patient has been severely afflicted with a
continuation of the disease, some degree of swelling, and
redness appears about the parts affected, which are exqui=
sitely sensible to the slightest pressure, and even the weight
of the bed clothes becomes almost intolerable.

The swelling and redness of the parts often bring some
relief, but the disease returns with equal violence, the reli=
=ef experienced, being but of short duration, the swelling
and redness seldom or never removing the disease.

These pains of the joints, are for the most part the last symptoms which leave the patient, they having been known to continue to the thirtieth or fortieth day of the disease, with more or less severity, however generally, they begin to abate about the eighth or tenth day, and seldom disappear before the twentieth.

Rheumatism differs from most of the Phlegmasia in rarely terminating in any other way, than that of resolution, however from being neglected, it sometimes manifests an evident disposition, to suppuration, altho from being subject to such frequent translations, it manifests the wide difference, betweene this variety of inflamation, and that of a common phlegmon,

It differs from Gout the only disease to which it has much resemblance, essentially, by not comeing on so suddenly, as the patient is most always apprized of its approach, by a gradual, and slow increase, of pain, by its

not having any attendant affection of the stomach &c.

It likewise differs from Gout, by its not being excited into action, by any of those agents which when indulged in, will very often bring on Gout; as excess in the use of spirituous liquors, high seasoned food, and a sluggish and inactive mode of living, none of which however freely indulged in, have ever produced rheumatism.

Gout too we know, not to be so injurious in its effects to muscular energy, but appears confined more to the nervous and absorbent systems,

Gout, generally has calcareous concretions of the joints after having continued sometime, which is never the case in rheumatism.

Sedentary habbits are those generally attacked with Gout, which is but seldom if ever the case in rheumatism;

There is a variety of this disease in which the diagnosis betweene it and Gout is more diffi

=cult; I mean, where the disease seizes on the intercostal muscles and is soon thence translated to the heart,

The pulse then becomes slow, and irregular, and is often followed by nausea and vomiting, but which by the prompt and energetic use of the lancet may be relieved as easily, as any other variety of this disease,

Gout is supposed to be preceded by indirect debility, and consiquently, generally, requires more indirect means, to reduce inflammatory action. Whereas rheumatism, from being preceded by debility of the direct kind, requires the more immediate means to be resorted to, so as to equalize the general excitement of the system, with the accumulated excitability of one or more parts.

From the age of puberty, to that of twenty or thirty years, has been observed by Authors, as those periods, in which this disease is most apt, to make its appearance,

Men are more subject to this disease, than women, which proceeds in part from their occupations necessarily exposing them more, to the inclemencies of the weather.

Countries attended with sudden changes of the weather, from a very warm, to a cold temperature or from a moist to a dry atmosphere, are those, in which we find this disease most prevalent, and consiquently there are few Countries, which have more rheumatics in it, than our own,

It is most common among the labouring class of society, sailors, soldiers, and men who are engaged in labouring for a subsistence, are particularly apt, to be attacked with rheumatism

It occurs at some periods of the year, much more frequently than at others, and it has been observed to be most prevalent, in spring and autumn, which is to be alone attributed, to the more frequent changes in the weather, consiquent

a fever, which ultimates either in the disease in question, or in some, more or less violent inflam=matory affection,

I presume if patients while exposed, were to remain in those situations, or at least change them, more by degrees, they would seldom, if ever be troubled, with the numerous constitutional derangements, which soon=er or later succeed; untill this rule is observed of adapt=ing always the different variety of stimuli so as to suit the more or less accumulated excitability of the system, we may hope, and wish, but never can calculate on preventing, the prevalence of Pneumonia, Rheumatisms and Catarrhis,

This disease often baffles all attempts which may have been made, with a view to reduce it, and shows the difference betweene this variety of inflam=mation, and that of a common phlegmon;

Perhaps this may arise, from the seats of the two

diseases being different from each other.

The precise seat of rheumatism has never I believe, been determined upon, however it appears to be situated primarily in the capsular ligaments, tendinous sheaths and aponeurotic expansions, and no doubt, but that there is often inflammation in the cellular membrane about the joints inflamed.

The treatment which I should recommend to be first resorted to in this affection, and it is that and it is that which generally leads to the most successful practice, is the prompt and energetic use of the Lancet, and you should draw as much blood as can be taken consistently, and continue the use of the lancet, as long as there is a vestige of inflammation left; after general bloodletting has been resorted to, and without being attended with success, the local abstraction of blood is particularly to be attended to, and there is perhaps no means

by which we can accomplish this with as great a probability of success, as by the application of leeches;

This is a remedy I think too often neglected in this variety of inflamation, for if persisted in for a sufficient length of time, we are of opinion, that those affections about the joints, so obviously the effects of inflammatory action, would but seldom, if ever, be met with in this disease.

The remedy which comes next to be mentioned, is the exhibition of purgatives, these do not appear to produce the same benificial effects in this disease, that they are so capable of affording in most other inflammatory affections, however they are essentially necessary, and should be exhibited so as to produce a regularly soluble state of the bowels,

They act benificially in other respects, for altho they act, not so directly, in controuling the hearts action, their good effects are evident, from the increas-

=d secretion of serum, which this class of remedies
produces from the intestines, more particularly if
the neutral salts be used, which produce benificial
effects likewise, by the power they have of increas=
=ing the absorption of any fluids effused, which
they accomplish by a twofold operation; namely,
by depriving the bloodvessels of a portion of their
serous contents, and by augmenting as a consiquen=
=ce of this, the reabsorption of serum, from those
cavities in which it may exist in a state of
morbid accumulation; they likewise no doubt,
contribute in some degree, to the relief of the dis=
=ease in question, by the sedative effects, which

I am disposed to think, the neutral salts
produce in a greater or less degree, in all cases,
when taken into the stomach.

The cathartic preferred, is the super tartrate of=
=potass and jalap combined;

The nitrate of potass has been long considered, a valuable remedy in rheumatism, and very deservedly so, as it is among the most useful auxiliaries that we resort to in the cure of this disease, and particularly when combined with tartarised antimony, we here have the advantages emanating from both medicines, in a more condensed formula, and which produces much better effects, than either when exhibited seperately;

Emetics. These have seldom if ever been employed, tho they are thought by some, to be used with advantage after the excitement is properly moderated by the lancet, however if employed at all, they are found to produce most benifit, when exhibited in nauseating doses; with a view to accomplish this object, the tartarised antimony has been exhibited with very benificial effects, in considerable doses;

It is mentioned in Dr Gregory's work, as having been given in doses as high as a grain every hour, in a small quantity of water, and it is remarked, that in this manner, twelve or fifteen grains can be taken in the space of twenty four hours, without vomiting succeeding its exhibition,

In urgent cases, where you have debilitated subjects to manage, altho debility which is often only apparent, should not prevent us from the free use, of the lancet, however, where the patient has been already depleted, without the desired effect being accomplished, or where further depletion is objected to, the use of the tartarised antimony, in combination as is before stated, or exhibited alone, will be attended with very happy effects, assisting it in its operation, with warm diluent drinks, which may have a tendency to relax the surface, and increase the action of the capillary vessels.

I should not recommend the tartarised antimony to be used with that degree of freedom, that we find it spoken of, as having been advantageously exhibited, but for the most part, a table spoonfull every two hours, of a solution, formed of four grains of tartarised antimony, in eight ounces of water, will generally accomplish all, that is to be expected from this remedy;

All the different diaphoretics as the mezereon sarsaparilla, Guaiac wood, volitile tincture of guaiacum, &c, which prove such useful remedies, in the chronic variety of this disease, may with propriety be used in rheumatalgia, after the antiphlogistic regimen has been properly adhered to, and the patient is convalescent.

Mercury, This has been recommended, as a very useful remedy in rheumatism, and Dr Gregory observes, that calomel will seldom be found even when exhi=

76

=bited in large doses in the acute variety of this affection, to produce much effect on the salivary glands.

I should not recommend this remedy in the acute stage of this disorder, for as it is one of the effects of mercury, to increase the excitability, it appears an improper remedy, atleast it should not be used, untill some reduction of the circulation has been accomplished, and then, particularly where the patient objects to your persevering further, in the use of depletory means, mercury may be resorted to, with the most flat=tering prospects of success.

The same precautions are required to be attended to, in the exhibition of Opium in the acute stage of this disease, as I mentioned were necessary to be observed in the use of mercury, and it is more neces=sary, where Opium is given, that the proper depletory measures had preceded its use, for altho a deceitful

calm of the system may be produced, and the pa=
=tients sufferings assuaged, the relief is however of
but short duration, and then the patient is more
restless, than previous to its exhibition, however
it is of essential service, when given in a state
of combination with some emetic medicine,
as the pulvis Ipecacuanhæ compositus, or when
given in form of tincture, paregoric elixor &c. in combination with
antemonial wine, it will be found to pro=
duce very fine effects.

Morphia a preparation of opium lately brou=
=ght into use, may one day prove a very useful
remedy in the treatment of rheumatism, from
its action being thought by many exclusively
sedative, however this is a contested point, and shou=
=ld it be decided to produce, as is generally
supposed, an exclusively sedative effect, I do
not hesitate to pronounce it, as one of the

most valuable additions to the treatment of this disease, of which the science of medicine could boast. ———

An

Inaugural Dissertation

On

Pneumonia biliosa

by

John Lambert.

Ein

Immerwährender Kalender

zu

Verewigung Bilder

von

Felix Lambert.

Pneumonia Biliosa is a compound affection originating from a double remote cause hence the name which refers you to the two organs principally concerned. This variety of pneumonia prevails principally in marsh districts in wet and cold seasons and is produced by the joint effect of Miasmata and alternations of temperature. It is therefore the immediate offspring of a low temperature engendered on a miasmatic predisposition. In the southern and middle states it has been called bead pleurisy it has also been called not unfrequently pneumonia typhoides from an erronious opinionion that it never assumes a more inflammatary form.

It is however properly speaking an inflamation of the pleura or lungs combined with a remittent fever and is found most prevalent in those sections of the country where Mill ponds, marshes and stagnated waters are mos numerous. It is also found in newly settled countries where the land is sufficiently cleared to allow the sun to have free access to the surface of the soil and bring about the putrifactive

Children independent of their being less exposed to the remote and exciting cause (says Professor Potter) are much less liable to this disease than adults. Very old persons are less susceptible to pneumonia biliosa not ~~because~~ that they are invisible to cold but because they from long habit have lost the capacity of being effected by marsh miasmata.

Women although more liable than children are less obnoxious to it than men owing in part to their regimen being in general more temperate and also their occupations are calculated to evade both the remote & exciting causes.

Negroes notwithstanding their antipathy to cold and which too they are less able to endure than whites are rarely afflicted with this species of pneumonia.

We will always find those persons who are predisposed to pneumonia exceedingly liable to this affection they may however by living under the influence of marsh effluvia and not exposed to a temperature to produce the disease have this predisposition gradually giving way to a miasmatic or which

will predominate and on being removed from the action of miasmata the predisposition to pneumonia will regain the ascendency. If one with a miasmatic predisposition be expos ed to a low and equable temperature a sufficient length of time the stomach and liver (by the suspension of the putri (active decomposition of vegetable matter) will be enabled to recover all their former healthy functions and the predis position be eradicated. This however is not always the case for in a winter succeeding to an autumnal fever pneu monia bilioza is always more prevalent. By a sudden vari ation of temperature it will effect a great number so that it will be rather epidemic than sporadic. Those who have had intermittents suspended by the premature use of peruvian bark and other tonics together with those who have not undergone sufficient evacuation are exceedingly liable to be invaded by this disease. On the contrary when they are well evacuated the character of common pneumonia prevails over the miasmatic affection. The premonitary symptoms of this

disease are various in number and degree. Notwithstanding however the disease sometimes seizes without any discernable previous indisposition.

In its forming state there is great lassitude, loss of appetite nausea, bitter taste in the mouth more particularly in the morning, constipation from suspended secretion; pain on pressure over the abdominal and thoracic regions

an obtuse pain in the region of the liver extending along to the lungs not unfrequently to the shoulder by the natural consent of parts and sometimes by a continuity of inflamation along the membranes. We therefore can have an inflamation of the pleura complicated with an hepatic affection without the lungs being implicated, if however the disease is suffered to progress the lung will soon become concerned and partake in the disease. When this pleura alone is concerned the pain is much more acute than when the parenchyma is affected independent of the membranes which may be the case in phthisical habits

2

Diarrhea with pain and tenesmus from the vitiated secretions with a mucous discharge slightly tinged with blood is not an unfrequent occurrence. Soreness of the flesh, pains in the back neck and extremities precede the attack as frequent as it does common intermittent

The skin exhibits various shades and is not unfrequently tinged with bile some days before any other symptoms are evident. In short all the symptoms that betray a disturbed state of the liver. An acute pain in the head is the most constant as well as the most prominent symptom in a great majority of cases. The disease is most commonly ushered in with a chill followed by a reactive fever.

This disease like all the miasmatic class seldom observes a continued type and the general symptoms are attended with all the variety which characterizes the ordinary remittent fever exhibiting the whole series of varieties in grade from the highly tonic and inflammatary to the typhus form. The pulse is small hard & frequent the tounge white and furred a burning in the differ

t stages the various shades of yellow and is graddually converted
nto a dushy brown with the edges somewhat smooth and red,
he eyes are red and prominent while the conjunctiva wears a yell
owish aspect, the skin is dry and hot, the urine scanty and high
coloured, there is a cough with expectoration which distinguishes
his variety of pneumonia from all others it being slightly tinged
ith bile, delirium frequently supervens between the attach &
rmination of this disease. When the disease is suffered to
en on unmolested these symptoms become more aggravated
excitement wears out the excitability and the patient is placed in
e most abject state of debility, the disease then assumes the typhus
ype. It may however assume this type from the onset as for in
nce where the accumulated excitability under a diminished temperature
superadded to a body much debilitated by a miasmatic predisposition
d the system yet able to raise the excitement to the summit of mor
action the nervous system being unable to bear the impetus of blood
t from the heart great prostration of strength and oppression of the
ital powers will be the consequence. It is moreover true says

Professor Potter in some debilitated subjects such as has been long
laboring under chronic debility from other diseases or the influence
of intemperence some few die in the cold stage.

From there considerations it has followed that different and
opposite plans of treatment have been pursued.

Some from the great prostration condemn bloodletting and pur
ging in this disease. Others who have seen the disease in its more
inflammatary form are strong abettors for the antiphlogistic plan
of treatment. It would be superfluous in insisting on the use of
the lancet in those cases that manifest distinct evidence of strong vas
cular action when frequently in the onset of the disease the abstraction
of a large quantity of blood in conjunction with calomel purges you
may put a period to the disease and have no further trouble.

Whereas in the low state where the pulse is small hard and preter
naturaly frequent and sometimes no distinct pulsation but as one
continued rolling stream, we must use the lancet with great
circumspection. Here we are compelled to bleed often and small
quantities at a time if we cannot bleed generally we must bleed

cally by cups leeches over hypochondraic and thoracic regions
pondus
thus cautious, we will in a great measure remove that torpid state
of the alimentary canal that characterizes this disease
The purgatives then will be more effectual in accomplishing
the object they are intended. Bleeding however without the aid
of the transcending powers of mercury or other purgative medi
will not cure the disease.
cines. It will increase the sensibility and when the poison
ous secretion of the liver shall have been formed its constant
irritative action on the system aggravates the symptoms and
the pulse becomes harder smaller and more frequent.
But in ratio as the black or green bile is evacuated by pur
atives so will the symptoms be milogated. If says Dr potter
we were restricted to any one class of medicines it would be
wise to select cathartics. This disease being of the miasmatic
class mercury claims the preference it can however be com
bined with aloes and gamboge with advantage. With regard
to length of time purging is to be kept up it would be a good
rule to continue it until the secretions become natural

the feaces resume their healthy aspect. It is also to be borne in
mind that black bilious discharges can be produce by calomel
when the liver is in a healthy condition, we in such cases must
be governed by other symptoms which will be suffiecently evident
to inform us when we have purged sufficiently.

Where the stomach on account of its extreme irritability
reject all our medicine we are then to invite the action of
the intestines downwards by an enemata and as soon as
the stomach is appeased we may give calomel in doses
from ten or fifteen to twenty grains (as a large dose irri
tates the stomach no mor than a small one) this may
be repeated in time and quantity according to the exigen
cies of the case. Emetics are usefull by their determining
the fluids to the surface and produce an increased secre
tion from the skin which is defective, they emulge the
biliary ducts and facilitate the action of cathartics
their early exhibition may cut short the disease. are in such
cases that by their inflammatary action forbid forbid the

se of emetics we may use them with advantage after the in
flammatory action shall have abated or subdued by other mea
sures In those cases also of a weak vascular action they
may be advantageously administered by being carefully com
bined with some stimulating diaphoretics such as carbonate
of ammonia, camphor polygala senega serpentaria cupa
torium perfoliata. Blisters can be usefull in those cases
only where the pulmonary symptoms are most prominent
then the vascular action must be first subdued by the lancet and
other antiphlogistic measures. They may in some instances
appease the irritability of the stomach or remove some local
affection about the thorax. Opium may by its stupifying
effects sooth the pain but as soon as that goes off the pain
returns, it may be given with advantage in combination with
calomel where there is a tendency to watery purging.
The warm bath can only be usefull by restoring the lan
guid excitement of the skin increase the perspiration by
subduing arterial action by being long continued.

An

Inaugural Dissertation

on

Dysentery

Submitted

to the

Provost and Medical Faculty

of the

University of Maryland

and more particularly

to my most excellent Preceptor

Doctor John N. Worms

and the

Renowned Nathaniel Potter.

By

Thomas A. Davis Maryland

for a degree of

Doctor of Medicine

Dedicated
to
Doctor John M Memms
as a
testimony of regard
for
his talents and Professional acquirements
By
Thomas A. Davis

Dysentery.

From Dus difficulty, and Enteria the bowels. A genus
of disease in the Class of Pyrexiæ, and order Profluvia
of Cullen's nosology. It is known by Contagious Pyrexia
tenesmus, and frequent griping stools, which are chiefly
mucus, but sometimes streaked with blood, the usual fæces
being retained, or evacuated, by difficult and small
quantities, and is called soy Colla. This disease is an inflam
mation of the mucus membrane of the intestines, produc
ed by Cold & Heat and their Ordinary Concomitants,
occurring principally in the summer and Autumn months
and frequently accompanying, the Intermittent and Re
mittent Fevers of those Months, and consequently from
its association with those fevers; it is rendered a Disease
of a very Complicated and doubtful Character. In
noticing the symptoms of Dysentery, especially in Con
nection with the Fevers above mentioned, it is necessary
to observe that it is marked, that is the first stage, by
the usual Fever, chilliness and Languor, which is quickly
succeeded, by intense heat and thirst, and after a
subsidence of these marks by those symptoms which
are peculiar to Common Dysentery. But the Character
of these symptoms, are not generally admitted as the first
and most undubitable marks of Dysentery, but it more
frequently happens, that the Topical symptoms first
disclose themselves to our view, the bowels become constip
ated, with an inordinary degree of flatulency, severe grip
ing, frequent inclination to go to stool, loss of appetite, nausea

vomiting, frequency of pulse and considerable febrile heat
sometimes, though seldom, symptoms of common diarrhea
supervene, which are distinguished from Dysentery, by
the absence of fever, and the shortness of its duration
and in indulging this disposition, tenesmus is produced, and
slight evacuations are the unhappy result of our efforts and
by degrees the tenesmus becomes more considerable, the griping more severe, and the stools more frequent, and Dysentery
more completely developed. This disease frequently is not attended with much fever, and does not make its appearance
until some days after the above symptoms have manifested
themselves, and it may then be looked upon, as moderate
in its character. But on the contrary, when it assumes the
appearance of a well marked Typhus, and becomes
from the first and continues throughout, a Synocha generally, we must apprehend great danger, and a calculation upon a very extensive putrid disease, aggravated by
the symptoms of Dysentery; when the Inflammation which
usually characterises this Disease, is about to locate itself
in the posterior part of the Intestinal Canal, there is an
increased frequency of the discharges, but little alteration,
and whilst it is passing through an inflamed part, it occasions great pain, and every evacuation is succeeded by
a severe griping. The evacuations are subject to a variation
both in colour and consistency, being sometimes composed
of froth & mucus, streaked with blood, at others of an acrid
watery Humour of a very fetid smell: sometimes pure blood
now and then lumps of Coagulated mucus, as well as not

pass on to the other page

one of the most prominent symptoms of the disease, but
on this Organ evacuates any Vicious matter or not I can
say, nor has it been satisfactorily proved. But as these evacua-
tions are governed by the same circumstances, under the
seasons and influenced by the nearly the same exciting
causes, I am disposed to conclude, that there are inse-
parable connexions, existing between this discase and the
of the bile. It has been asserted, though without very
just grounds, that the Effluvia arising from putrid
vegetable matter readily affect the alimentary Canal
capable of producing genuine Dysentery. This however
Cullen refutes but not in toto, and admits that this
Effluvia may act on the Canal, so as to produce Diarrhea
but no regular Dysentery. Sydenham goes further
makes this putrid Effluvia Critical the Cause of the
-gious nature of the disease. Dysentery seems likewise arise
from the use of unwholesome and putrid Provisions
-lations arising from Commercial grounds, have largely assisted
as a cause and generally seize upon armies encamped
the neighbourhood of these vapours. Irregularities and an
-cial disposition in the atmosphere, seems to predispose
give rise to Dysentery, in which case it prevails Epidem
-ically. With respect to the many causes of this disease
Many contends that there is but one to wit Contagion
And that the other supposed causes, serve only to ga
the operation of this one. This however is very justly
remote Cause, but to assert this is the only Cause is im
for when we admit Contagion to be a cause, we must a

unfrequently a small quantity of purulent matter is discharged. Sometimes the evacuations consist of mere mucus, mucous matter alone untouched, in any degree whatever by the appearance of blood, and which constitutes that disease called Morbus Mucosus vel Dysenteria Alba. Whilst the passages are made up of these morbid matters, and whilst the miserable Patient is tormented by a proportioned frequency to stool, and his very inside, violently lacerated by these evacuations: in vain does he gape and anxiously look forward, for some temporary relief, some abatement of pain, griping and tenesmus, which a natural discharge could effect. It frequently happens, from the violent efforts made on the part of the patient to discharge the irritating matter, that a portion of the gut is forced below the verge of the anus, which on the progress of the disease proves a troublesome and distressing symptom. The duration of Dysentery is likewise variable, the milder as well as the severer kinds of the disease terminate their course generally in a few days: those which elude themselves in the form of abstinacy, without transcending the bounds of method often protracted months, and those cases too, which are favoured with little or no discharge of scybalæ often continue until that circumstance occurs, until the operations are changed, and the fever somewhat abated, or attended with a remission of those symptoms, particularly of the frequency of the stools, griping and Tenesmus. The symptoms of Dysentery, are by Linnæus Vogler & Cullen referred to two orders (viz) Local and general: and which are so

3

intimately blended with each other and one so subservient to the government of the other, that an individual description of them would be useless as well as imperfect and I do to some extent question the propriety of such a classification an arrangement. For there never was a confirmed case of Dysentery in which there was a local affection alone, no tenesmus, gurling, no inflammatory discharge of mucus matter, no heat of system, partaking in a more or less degree, of the febrile heat, languor & debility, the usual concomitants of this disease. But it really does appear from a variety of facts, that the contagion, or the putrid effluvia attending Dysentery may excite a real Typhus, independently of any local disease affection, in which does not frequently, for some time, after a development of the symptoms of the fever, and indeed does not appear at all. Which such a fever then forms continues for some time, before the local affection shows itself, the case according to Doctor Millions is to be regarded, as a complication of Typhus and Dysentery but more particularly of the latter grade of the former, for in the case of complete Dysentery, he says we shall find sufficient proof of the genial affection depending on the local, of one being influenced by the other. Very often both the large and small intestines participate of this disease, but by a strict attention to the local symptoms, we may often conclude, what part of the intestines, the seat of the disease is situated. If the small intestines be diseased, the pain is often very acute, and the Patient complains of a twisting round the umbilicus

and when the disease is confined to the large Intestines, there is generally flatulency and uneasiness of the stomach, nausea and vomiting more urgent and the fæces more intimately mixed with blood. Notwithstanding the foregoing last just laid down as an indication of the situation of this disease, the sympathy which naturally exists between different parts of the Intestines, when the disease is constantly changing its place, renders it a matter of some difficulty to determine with accuracy the seat of the disease. Dysentery may readily be distinguished from diarrhœa by the absence of fever, the appearance of the stools tenesmus and other symptoms. When this disease is of long standing and has become habitual, it seldom admits of an easy cure, and its fatality too is almost certain. When all the symptoms of this disease unite and attack a patient labouring under any Pulmonary disease, or whose constitution has been enfeebled & and almost overcome by some protracted disease, or indeed temporarily acted upon by an endemic or Epidemic, the situation of the patient is truly critical & dysentery according to Doctor Millson, rarely terminates in a short time, not less than 6 or 8 days, and this is owing to the Tenesmus remaining, after the other symptoms have partially subsided, or totally disappearing. The lower parts of the Intestines are the last that recover their tone. and when it is accompanied by cases of much debility and emaciation, it generally establishes the foundations, there of for other diseases, which tend greatly to debilitate the system, viz Diarrhœa Dyspepsia and pains at the bowels

3

The Fever in Dysentery is not always Continued, but occasionally
assumes the Tertian Type, and in many Cases its remissions
are Characterised by great irregularity, But these remissions
are not by any Means Considered Unfavourable; for there
never Was a Case of Fever that remitted Regularly, that Could
be that an account of that Circumstance, be deemed Unfa
vourable. After having laid the pathology, and diag
nostic Symptoms of this disease, by which a Physician
may Judge of its Character, both with regard to its attack
upon the System, and the termination of its Career, I must
turn my attention to the Causes.

Dysentery occurs more frequently in Autumn & summer months
And is more a disease of Warm than Cold Climates
Among the many Causes that Combine to produce this disease
as Heat, checked perspiration, and a sudden transition from
a hot to a cold temperature, rank among the first. And the
great liability which a disease manifests of being translated
to any of the mucous Tissues in the body, accounts to us why
the Alteration of these Causes upon the Skin usually falls
upon the Intestines. And in the operation of this disease there
is another fact strikingly, that it commonly occurs under
the same Circumstances and Seasons, which affect the
state of the bile in the human system, and from that
circumstance great doubt has originated, whether or not, this disease
has the same Causes to excite it as the bile, and whether there
is not a great Connection between this disease and the state
of the bile; It is certain, that the Stomaches more or less suffer
attack in this disease, and great nausea and vomiting are

of the most prominent symptoms of the disease, but whether this can evacuates any bilious matter or not? I cannot say, not having ever proved, But as these evacuations are governed by the same circumstances, under the same seasons and influenced by nearly same exciting causes, I am disposed to conclude that there is an intimable Connection existing between this disease and state of the bile, It has been asserted though without very just grounds, that the effluvia arising from putrid animal matter only affect the alimentary Canal, and is capable of producing Genuine Dysenteries. This however Cullen disputes, but not in toto and admits that the effluvia may act on the canal as to produce diarrhea, but no regular Dysentery. Immerman goes further and makes this putrid effluvia constitute the cause of the contagious nature of the disease. Dysentery seems likewise to arise from the use of unwholesome food. Noxious exhalations arising from low marshy grounds have highly destructive as a cause and literally enzootic from armies encamped in the neighbourhood of these valleys. Unripe fruits and an especial disposition in the atmosphere, seems to predispose or give rise to Dysentery in which case it prevails Epidemically, with respect to the many causes of this disease, many contend that there is not an in toto Contagion. And that the other supposed causes serve only to favour the operation of this one. This however is very justly a remote cause, but to assert that this is the only cause is improper, for when we admit Contagion to be a cause, we are at once necessarily compelled to admit

the sources of Contagion, and when we examine & analize the different materials which enter into the Constitution of Contagion, we will there discover that those ingredients are individually, capable of producing Dysentery Dysentery is only generally admitted to be Contagious, but not in all cases. I do not suppose that this cause alone can produce the disease, unless the system, has been previously disposed by debility &c for it, or without the aid of some other exciting Causes. The sources of Contagion are many, and the chief one according to Zimmerman is from the excrements, for the smell of it communicated the disease to many, and it appears more as the excrements, the more Contagious is the disease. The ways by which this disease is conveyed and propagated are also many. Some seem to think, that Cloths and Furniture which have been in contact with Dysenteric patients, have had access to the effluvia arising from the patients body, are the vehicles of the disease and filthiness, bad diet and ill contracted habits, aiding aggravating the symptoms, and seems to be one of the chief Causes of the greater virulence of Dysentery among the lower class of People, This may likewise be the Cause of the greater susceptibility of the disease in a very emaciated and debilitated person Habits, however, induced. Notwithstanding this observations, it appears that irritation of the Intestines aggravated and kept up by retained bile, worms, or hostile matter for any length of time, may terminate in Dysentery & that such Causes are favourable to the propagation of Dysentery and tend to increase its virulence, ordinary practice

renders indubitable. Cold as a cause of Dysentery, almost every writer on the diseases of armies, informs us that it is in a great degree a very aggravating one, and this depends upon its alternating with heat, which probably is one of the causes of the unwholesomeness of warm moist weather; when the heat during the day produces a vapour which being condensed, occasions the dampness and chilliness of the Evening. Concerning putrid effluvia, whatever part it may have in producing this disease, it seems fairly however to increase the violence of the symptoms, and render it more infectious. Doctor Munro attributes the cause of Dysentery principally to obstructed perspiration and exposure to the putrid effluvia, but a disregard to cleanliness increases proportionally, the contagion of this disease, and from all proofs we are indeed to believe that there is something specific in the contagion of Dysentery. Thus it seems from the enumeration of causes and circumstances not improbable, that the application of cold, dust, difficulty digestion &c, which would ordinarily produce diarrhea, may when exposed to putrid effluvia give rise to Dysentery. And this suggests that a very simple concatenation of circumstances acting upon the chief causes of Dysentery may be productive of contagion. But Dysentery should not arise from this cause alone, nor is there in my opinion and I may say in the opinion of Zimmerman & others, allow a mature and deliberate consideration of the mode and theory of the action of causes, and individual circumstances, to the exemption of

every other exciting cause capable of giving rise to occasioning this disease; for as I have observed before, it is altogether owing to the state of the system which must be rendered susceptibility of some other predisposing causes, before a genuine dysentery can be produced. In winding up with the treatment of this disease, to which I now most respectfully call your attention, I shall be brief in its description, prescription and enumeration in its adaptions, though the last by no means the least important part of my description. The great difficulty which most frequently presents itself to a Physician in arresting the grasp of the great foe to mankind, and rescuing fallen nature from its apparently ominous to the eye, of the most superficial observer.
Though the Materia Medica on one hand arms us with abundant resources, and a minute anatomical knowledge on the other, will warrant us in making the attacks; apt to ensure a perfect adaptation of those means, to aid the anxious efforts of nature, and to fit them with precision to how calls, is a task difficult in its execution, yet so happy in its results and so worthy of the attention and study of every enemy to disease: And unless a Physician keeps this in view, the great history of our science he deviates from his path, and instead of accomplishing that which duty suggests, he violates her decrees, and the carrion which he mistakingly interposes to parry the destruction of vitality, serves only to concentrate its forces and weaken the paralising efforts of nature, in surrowing the conquest of disease

among the remedies which are employed in the treatment
of this disease I shall class Antim Epicac Ipecacuana
the mild purgatives, such as the neutral salts, and
Rhubarb &c, and astringents and occasionally bleed
ing and lastly that, which holds its sway over
almost every other disease, and which if deprived of
would at once destroy that basis upon which chiefly
our success depends, I mean Mercury. This variety of
remedies however are to be prescribed according to circumst
ances, and as I do not assume an distinct variety in
which the disease may appear demanding the alternate
use of some of this class of remedies, and as the want
of time and other circumstances beyond my control
have prevented me from entering any further, I am compe
lled very abruptedly to take leave of the subject

An
Inaugural Dissertation

On

Congested Bilious Fever

For the Degree of Doctor of Medicine

By

Henry Brook

of

Prince George's County

Maryland

On Congested Bilious Fevers— In Selecting this subject, to offer the few remarks which in conformity to long established usuage, we are compelled to make— I am not ignorant of the difficulties which encumber this subject, but from this consideration alone, I should be condemned in my own estimation, were I to decline it—

I have had frequent opportunities of witnessing the ravages of this intractable Malady—

I have seen the most promising youths, the Lillies of our Valleys cut down in a moment by the screening hands of this fell destroyer— I myself have witnessed the loss of those from whom I might have anticipated much future pleasure— It is a subject you will perceive in which I feel greatly interested, and one in which my warmest wishes and solicitations are to enlist the Talents of those more competent, and from whom we might with propriety

priety expect something new in the medical treatment of this formidable disorder, whereby it may be rendered less fatal in our low marshy districts. And it is not with the vain illusive futile hope of offering any thing new myself that I have chosen to write on this subject, nor shall I trace the Disease through all its various changes, which it will assume when reaction does take place, which however is but seldom; but when reaction does take place the indications are plain and the treatment simple. I shall therefore invite your attention exclusively to that state of the system which seems to me most imperiously to demand it. When a person who was only a few days previously in the bloom of health and vigour is suddenly prostrated by all the marks of exhaustion and debility, we naturally infer that these symptoms are fallacious, but as fallacious as they may be, call them the effects

effects of indirect debility or what you will, I will candidly put it to the good sense of those who so much oppose the doctrine of Brown to say whether the indications in this apparently exhausted state of the system, are to deplete or Stimulate; we hear much of the term indirect debility, the phrase I must confess, has hitherto conveyed to me no certain definite meaning. I have seen or heard no definite idea affixed to it, but rather it seems to me a garb to hide the ignorance of our profession; we are told to be aware how we mistake this ~~indirect for direct~~ debility and that fatal mistakes have resulted. How I would ask are we to treat diseases if we disregard indications, to the question put a short while ago I will now exemplify by a familiar illustration we are told, as I have before observed, and

natural

natural enough, that is it impossible for a man
in the bloom of health to be so suddenly struck
en down with this extreme debility, if a man
receives a blow on his head, I care not how
his health may have been at the time, concussion
is the consequence, so what do we see in this case,
it is evidently one of debility. And if we do
not treat it as such the chances are against sav
ing the life of our patient, nay if we treat it
in the first instance with the view of reli
ving the congested state of the vessles, by the
system of depletion, we are in my opinion
as guilty of homocide as if we had destroyed
the life of our patient by direct violence.
The Marsh poison in the case alluded to
acts in precisely the same way, at least the
symptoms produced are the same, and
reasoning from analogy, which certainly
is the surest mode of deducing proper conclusi
ons

ons, we are compelled to allow, the action of the causes to say the least are very similar - When we hear Authors of the highest respectability advising and prescribing remidies for a disease the tendency of which is evidently to debilitate still further, we are lead in justice to conclude that either never saw a case of the disease for which they prescribe or they are led astray by false pathology, they have erected their premises falsely and their Conclusions are equally so - The misfortune is that mankinds are too fonds of novelty, and they receive a new doctrine which have much to recommend it, they are too apt to lay aside the old which if properly culled would afford much useful knowledge. I am not for detracting from the merits of the System of depletion, but I should be wanting in

in candour were I not to proclaim against such practice in the treatment of the disease which I now have in consideration.

Having premised these few observations we will next proceede to consider the Symptoms, which characterize this state of disease.

Upon visiting a man who has been suddenly seized with a severe rigor, in whom we observe all the concomitants of oppression, great sighing with considerable depression about the Praecordia, Cold Corrugated Skin, weak feable and scarcely perceptable pulse, with cold Clammy Sweats, and all the marks of internal Congestion, these Symptoms I would suppose sufficiently indicates the adoption of those means most calculated to give tone and energy to the Congested Vessles so as thereby to enable them to overcome the Congestion, and estatelish a

Healthy

healthy equilebrium throughout the genral system. But under the same circumstances what would be the result were we to adopt the treatment recommended by Dr. Armstrong of bleeding and purging. Such treatment as this would certainly prove fatal as soon as it was put in practice, but if we had access to the Congested system of vessles, probably by such means we might effect much—

Stimulants are certainly in this State of the disease the most admisible remidies which we can employ, they seem to have the effect of assisting the vain attempts of a too much exhausted power, which enables it to bear up under this oppressive burden, However I will not theorise upon this point, but will illustrate the position by a few cases which have fallen under my observation. About the midle of last october a Lady a friend of mine

was attacked with what is Called Congested Bilious fever; As her family physician could not be had, to see her being sick himself at the same time, She sent for me- When I arrived I found her in a low condition labouring under all the marks of great congestion, with cold extremities, imperceptible pulse, great depression about the praecordia evinced by incessant sighing, with great irritability of the stomach- Thinking however as authors tell us, that these symptoms were the effect of indirect debility, produced by Marsh Poison I immediately prescribed a 20 grain dose of Calomel which operated twice or thrice, and prostrated her still further, the symptoms threatened immediate dissolution if not speedily relieved- Being placed in this situation I was compelled to resort to the most powerful diffusible and permanent stimulants, by which however I succeeded in saving her life, the stimulants which I used were strong Mint Sling, Lavendar rum and large doses of Sulph: Quinic- The next day the obstinate irritability of the stomach, was removed and she was Comparatively well, Complaining however of great debility which was removed by the Continued use of

of Sulph: Quine - Now reaction took place so mildly in this case, that nothing depletory became necessary. But in some cases which I have seen reaction has been so powerful as to require the repeated use of the Lancet=

I by no means wish to detract from the merits of the valuable system of depletion, but there are very many cases of this fever where we have to stimulate from the beginning, in which we have not the smallest indication for depletion, but when this system of treatment is indicated then and not until then should it be employed - I am aware that in certain cases we may by paying particular attention to the patients System, anticipate the occurence of high Arterial Action and in such a case as this we certainly can mitigate the disease by the earlier adoption of such means as will ultimately become necessary - With these few remarks I will now close my subject and submit it to your impartial judgment, with sincere respect for your talents and individual prosperity I have the honor to subscribe

Henry Brooke

An Inaugural Dissertation
— on the History of Medicine. — by John H. Jones
Submitted to the examination of the Right Reverend
Bishop Kemp — Provost, & to the Professors of the
— University of Maryland —

The History of Medicine presents to the human mind, the most illustrious display of talents, knowledge, science & learning. In every age of the world, from the earliest period of Society, the Professors of Medicine have been cherished, admired & respected. Nay — it's study seems to have been congenial with the origin of human nature, because those diseases which it is calculated to relieve are inherent in the frailty of humanity. From the period, that Adam was expelled Paradise, & enjoined to earn his bread by the sweat of his brow, disease and mortality were the constant companions of our frail natures. In the regular progress of Society, through succeeding ages, Mankind would naturally investigate the means of soothing their complaints, alleviating their pains, & warding off the shafts of death — whether these remedies arose from

bathing in the cool stream, or the application of herbs & minerals on the surface, or in the bowels of the earth, the Genius & authors of the discoveries of their use & healing effects would be respected and admired; nay— the blessings of society would follow the Man, & crown him with honor, who was successful in redeeming a Parent to his family from the jaws of death; or presenting to the embraces of ~~his~~ Parent, his beloved offspring, who had been languishing on a bed of sickness.— No doubt, the Person, who, by his superior education cultivates our Minds, & exhibits us as luminaries to society, & directs our steps in the paths of knowledge & virtue in this wayward world merits our approbation in a high degree. yet, what are all the lights of science or the profoundest discoveries of human Intellect, if we are nailed to our beds by the pressure of disease, & are incapable of exercising the efforts of our Industry on account of the debility of our constitutions. where the soothing hand of the Physician may be applied, who, under the direction, & with the cooperation of the great Physician of our souls & bodies, may be able

to restore us to health, & render us able in some degree to endure the toils, & discharge the duties of human life.— The Medical art, or Science therefore is of the first importance in human Society, & it's illustrious attainments & great utility command our admiration and attachment, & lay open innumerable sources of blessing & happiness to the human ~~Mind~~ race. How becoming it is therefore to study, to study it's History & be made acquainted with the distinguished characters who have adorned the Profession & shone as Stars of the first magnitude to a grateful & admiring world.—

The History of Medicine may be conveniently arranged into the three following Eras— The first commencing from the earliest records of knowledge, & continuing to the time of Galen— The second— from the time of Galen, through the dark ages to the middle of the eighteenth century— The third, from that period to the present day.

Much learned disputation took place about a Century ago, respecting the origin of Medicine, and even in our own times this point has been warmly agitated. Without entering into a minute

or critical examination of the different arguments that have been adduced, we may venture to conclude, with tolerable certainty, that in no country would there be any considerable approach to a State of civilization or refinement, in which some attempts would not be made to cultivate the art of medicine. The human frame, in every situation, is subject to the action of noxious causes, which must induce a derangement of its functions; and it is impossible that these evils could have been experienced, in any great degree without an endeavour to alleviate them. How this original foundation of medical knowledge was obtained, is a point in which we must be guided by conjecture; but we may conceive of many accidental circumstances that would lead to the first efforts. From the effect of particular kinds of food when taken into the Human Stomach, or from observing their operations on animals, some notion might be formed of Emetics and Purgatives and from the relief which had been incidentally experienced by the spontaneous evacuation of the Stomach and Bowels the Idea would present.

of obtaining the same relief by artificial means. If we include under the title of Medicine, not only that Science, which is at present so denominated, but likewise extend it to Surgery, which was originally the case, we shall be able to trace more satisfactorily, the gradual rise and progress of the art. Without thereof our gravely inquiring who was the first Physician; whether this honour belongs to Adam; whether our first Parent derived his supposed skill from a miraculous communication with the deity, from Instinct or from Observation, — we may conclude that the kind of Medicine which we have described above, would be among the earliest acquirements of the Human Species, and that this knowledge would advance in proportion to the Developement of the mind, or other subjects intimately connected with their existence and welfare. So far we may proceed upon the ground of probable conjecture. And we shall find the above conclusion to be sanctioned by historical testimony; for from the uncertain light which we derive from the earliest records of remote antiquity, we learn that Egypt, the country,

which is regarded as the nurse of the Arts and Sciences, was also the parent of Medicine, we have however little positive information upon the subject, except the simple fact, that in Egypt, there were persons who made Medicine, an object of particular attention. How far it was their exclusive occupation is doubtful; whether certain individuals were regularly trained to it, and made it their sole business, as in later times; whether it was attached to the Priestly Office; or whether particular persons in various departments of life acquired superior skill in the cure of diseases, we are not able positively to determine. The most probable conjecture however is, that the Priests were the first Physicians; a supposition which is favored by the scanty Records of Egyptian History and which is with more certainty known to have been the case among the Greeks, who borrowed from the Egyptians many of their institutions. From the account which is incidentally given by Moses of the Egyptian priesthood, it may be concluded that a considerable portion of their learning consisted in the dexterous management of the Arts of Magic and incantations, and it may be concluded that a large share of their medical

still depended upon the judicious application of the supposed preternatural power, to the imagination of their patients. This, has in all countries been the first step in the Art, and it has maintained its influence, in proportion to the ignorance of the individuals upon whom it has been exercised. Beyond this point it seems in vain to push our inquiries; at least all the information that we can expect to obtain is so blended with fiction as to become more a subject for Philological discussion than for scientific investigation. It is impossible for us to ascertain with certainty the very existence of the semifabulous characters, that are regarded in the mythology of Egypt, as the inventors of the useful arts, and among others of Medicine; and while it is not yet determined, by the most learned antiquaries, whether Ammon and Thouth, Serapis and Isis, are to be considered as real or poetical personages, it is obviously premature to endeavour to decide what share they had in the discovery or the Improvement of Medicine.
A fact is mentioned by Herodotus, respecting the State of Medicine in Egypt, which he probably

learned by his personal acquaintance with the country, but it refers to a condition of society long subsequent to that which we are now considering. He informs us that particular persons undertook the treatment of particular diseases only, or rather that they took charge of particular parts of the body. This state of the Art indicates on the one hand, that the practice of medicine must have been an object of considerable attention before such a division of labour could have taken place, while on the contrary, it demonstrates no less clearly that the Science must have been in a very low State, in short, that the only requisites for the Practitioner were, a degree of manual dexterity and the possession of certain empirical remedies. This peculiar State of things might in some measure, depend upon the custom which existed in Egypt, of handing down the same occupation from father to Son, through successive generations, which prevailed universally among the inhabitants and which though it may be favorable to the perfection of any particular art, must undoubtedly prove a decisive obstacle to the general improvement of Science and the

progress of the Mental Powers. According to the opinion of the most learned antiquaries the empire of Babylon or Assyria was even more ancient than that of Egypt and has been supposed to have a prior claim to be considered as the inventor of the Arts and Sciences. There is reason to believe that one of these Countries borrowed its knowledge from the other; and it seems upon the whole most probable, that it originated in Assyria. Yet the Assyrians have left direct testimony in their favour: and their knowledge, if they ever possessed it, has left behind fewer memorials, than that of the Egyptians. As the Inhabitants of Babylon, at a very early period arrived at a state of comparative civilization and luxury, we might conclude that Medicine would receive its appropriate share of attention. The priests of this people, or as they have been called, the Chaldeans, appear to have been the first body of men, who acquired a reputation for their learning, and although like the Magi of Persia and the Brachmans of India, their learning consisted principally in the arts of divination and astrology, yet we may suppose

that, like the priests of other ancient nations, they would become the depositaries of all the knowledge of the times.

The State of Medicine among the Assyrians in the age of Herodotus, was however, much less advanced than at the same period in Egypt, for this writer informs us that there were no Physicians in Babylon but that the custom was to carry the patient into some public place, where the passengers by inquiring into the nature of the disease might communicate any information which they accidentally possessed, from having experienced in their own persons, or observed in others, the operation of remedies in what appeared to be a similar case. But we must suppose that this kind of casual practice was only had recourse to in internal complaints, or in such as were thought peculiarly obscure; for it is scarcely impossible to imagine that in the common diseases and especially in wounds, a general routine of practice would not be established; for this we observe to be the case even among the most rude savages of North America or of Australasia

We find from some passages in the Pentateuch and especially from the account of leprosy in the Book of Lebiticus, that the Jews had made, at this early period, a considerable progress in the knowledge of medicine. But for this it is probable that they were principally indebted to their legislator Moses, who acquired it during his residence in Egypt. Much controversy has existed respecting the time when the arts began to be cultivated in the eastern parts of Asia; but it may be certainly concluded that the Inhabitants of India, were among the first who obtained any considerable degree of civilization. We have reason to believe that Medicine came in for its share of attention. The Grecian Mythology not only in its general outline but in its individual parts was derived from the Egyptians. The inhabitants of Greece when they were desirous of acquiring any superior degree of information had recourse to the Priests of Egypt, obtained from them the knowledge of which they were regarded as the sole depositaries and were initiated into their Mysteries. Of this knowledge, Medicine, such as it then was, principally composed of charms

and incantations, formed an important branch, and became in the hands of the Sacred Order, an Instrument rather of power and authority, than of benevolence. The Centaur Chiron, who lived in the thirteenth century, before the Christian æra has obtained the credit of having first initiated the Grecians into the art of Medicine. How he acquired his medical skill is unknown but it may be conjectured that in the state of society to which he belonged, it was considered rather as an accomplishment which attached to the higher ranks, than as a means of emolument. Among the pupils of Chiron was Æsculapius, who became still more celebrated than his preceptor, so that after his death, he was deified by his countrymen in gratitude for the services which he bestowed on them. He is said to have been born in Epidaurus - to have been exposed in his infancy and accidentally discovered on the mountains, a circumstance which favours the supposition of his illegitimate birth, and to have been afterwards placed under the tuition

of Chiron, from whom he acquired so much skill, as in Medicine, as even to restore the dead to life. He left two sons, Machaon, and Podalarius, who as we learn from Homer, accompanied the Grecians to the Siege of Troy, and possessed at least a considerable share of their fathers medical knowledge. The profession of Medicine became hereditary in the family of Æscalapius and when divine honors were paid to him at Epidaurus his temples were the depositaries of all the medical knowledge of the age under the superintendance of his descendants who were invested with the sacerdotal office. The veneration that was paid him in his native city continued to increase, and in the following century festivals and sacred games were instituted to his memory; at length temples were erected to him in various parts of Greece and he took his rank among the established divinities of his Country. After a lapse of many ages in consequence of a fatal epidemic which raged at Rome, the Senate were

commanded by the Sybilline Oracle, to transfer the worship of Æsculapius to their city. A solemn embassy was accordingly appointed for this purpose; when the god was said to have been stolen from his native place, under the form of a serpent and thus carried into Italy, where he was received with transport. The plague of course immediately ceased, his divine authority was recognized, and he continued ever to hold a distinguished rank in the Roman Mythology.
After the death of the Sons of Æsculapius, we have almost a total blank in the history of medicine, comprehending an interval of many centuries, in which there is no distinct record of any considerable improvement having been made, nor any individual so far distinguished above his contemporaries as to require particular notice
The practice of medicine in Greece was confined during this period to the descendants of Æsculapius, who were at the same time, the Priests of his Temples, and obtained the name

of Asclepiades. The temples that were erected to him were numerous, among the principal were those of Cos, Cnidos and Rhodes. From the imperfect account which we have of the practice of Asclepiades, we may conceive that it consisted in a great degree of those circumstances which were calculated to operate upon the imagination of the patients. It has been already remarked that after the death of Aesculapius, medicine remained for a very long period nearly stationary During eight centuries few additions were made, as its practice was principally confined to the Asclepiades a people strictly empirical confining themselves to the mere collection of facts.

About the end of the Sixth Century, a new era sprung up favorable to the pursuit of medical science among the Grecian Philosophers whose principal attentions were directed to anatomical or physiological knowledge, among the first of these was Pythagoras - whose deep and extensive researches we have no doubt added considerably to the progress of medicine, particularly in divesting it of

its supposed supernatural agency, by exposing it to general investigation. He was followed by Empedocles Democritus and others, who by their perseverance and acquirements surmounted all obstacles thrown in the way of this science from climate prejudice and superstition. The study of medicine received great advantage from the establishment of the Gymnastic exercises. The Gymnasiarchs, or superintendants were necessarily from the nature of their office, whose acquirements enabled them to take charge of any accident or disease that their pupils were liable to. Herodicus is said to have devoted particular care and attention to these games, and is consequently styled the inventer of the gymnastic medicine — Though the study of medicine was pursued by the Greeks for Eight or nine hundred Years, yet its progress was far from being rapid. It was placed on false foundations, the principles of which were in themselves fallacious. It is from this Period, about the middle of the fifth century, that all the information of antiquity on the subject of medicine is to be collected — when Hippocrates, the Father of Medicine appeared

This great Physician's principal attention was directed to the symptoms and cure of diseases, as well as bringing anatomical knowledge to perfection in the healing art. Hence we find his works abounding with anatomical facts and observations interspersed with the prevailing doctrine of the day. He derived the leading principles of his philosophy from the Pythagorean School, he supposed all bodies composed of earth, air, fire and water & that fire was the origin of all things. That the nature of the body was materially affected by the four elements, which enter into its composition, as well as by the qualities of hot, cold, moist and dry; which by their respective combinations, and proportions produce the four temperaments, influencing the mental and corporeal system, and laying a foundation for those diseases to which the Individual is especially liable. The great principle which guided the practice of Hippocrates, was the existence and action of what he termed nature; the efforts of which nature, he imagined had a tendency to repel the injury, and that the sole attention of the Physician should.

be directed to its proper action, regulated according to circumstances. Of his remedies, it may be observed from the tendency of his pathological doctrines, that they consisted principally of evacuants; he also administered diuretics and sudorifics; drew blood, both by the lancet and scarification, employed the cupping glasses, inserted Issues, and used injections. When it is considered how many obstacles were thrown in the way, in the pursuit of this science, from Ignorance, bigotry and superstition, the perseverance and acquirements of this great man, the ornament of the medical Profession, cannot be sufficiently admired. After Hippocrates physiological researches, continued to improve; but as opportunities were extremely limited from the prejudices of mankind its progress was but slow and chiefly confined to the two Schools of Athens and Alexandria. In the former the names of Socrates, Plato, Xenophon, Aristotle and Theophrastus, are still preserved along with many of their works, and tho' we observe that their general attention was directed to Philosophy yet Natural History and Medicine were far from being overlooked, their opportunities however, were

confined, particularly their pathological pursuits; and after their time the study of natural knowledge in Athens sunk for ever. But while it decayed in Greece and Asia, it rose with increased energy under the protection of the Ptolemies at Alexandria Among the founders of this school which was so long pre-eminent or at least among its earliest professors Erisistratus and Herophilus were highly distinguished, by the enlighten'd liberal patronage of the Ptolemies they enjoyed ample opportunities and the consequent improvements which the Science of Medicine received were very great. They are allowed to be the first, who obtained any correct notions of anatomy; they not only corrected many former errors, but wrote with great judgement upon neurology. They observed a variety of structure in nerves supplying different parts. About the period that the Alexandria School flourish'd, the two Rival Sects, the dogmatists and the empirics originated and between whom many warm disputes on the subject of medicine occurred, the principal of which was how far theory ought to influence the practice of Medicine.- About this period also the art of Medicine was divided into three distinct branches dietetics

Pharmacy and Surgery. Between the times of Herophilus and Erisistratus, a period of five hundred years, Asclepiades, Rufus, Ephesius and the sensible and elegant writer Celsus flourished. The two latter have given the appellations and situations of all the parts of the human body in compendio, in which many discoveries appear to have been made from the time of Hippocrates. Neither one nor the other dwelt much on the uses of the parts.- Celsus is the most classical writer that ever appeared in the art of Medicine.

We now come to the second æra in Medicine nearly about the second century of the Christian era, when a character arose more illustrious than any who had hitherto appeared Claudius Galenus, or Galen of Pergamus, who was Physician to four of the Roman Emperors, and was without exception the most distinguished practitioner of the age in which he lived. He has arranged all the prior researches of Herophilus and Erisistratus and incorporated them into his voluminous treatises, on all the branches

of medicine. The philosophy and medical principles of this great man were formed in the School of the Stoics, the Academics, Peripatetics and Epicureans. Galen was a man of uncommon erudition, he brought into one point of view, with much labor, learning and industry, all the medical and philosophical science of his predecessors. The principles of Galen reigned triumphantly in the Schools & Universities nearly fifteen hundred years, checking and crushing all attempts at innovation, or improvers, indeed it was considered a kind of heresy to attempt investigation beyond the limits prescribed by himself, his zealous disciples would not admit of what others thought an imperfection in the Works of their master, and to such an extent did they carry this principle, that it was even considered as more probable that the human body should have undergone a permanent change in its form and structure than that Galen should have committed an error. Galen was a decided Dogmatist, refusing to establish any thing

on the mere basis of reputed experience, but reducing all his knowledge within the limits of his theory and giving reasons for all that he believed. From the time of Galen to the fifteenth century, the improvement of medical Science was rather on the decline, his immediate successors, regarding him as beyond the reach of competition, were satisfied with the adoption of his opinions and considering themselves learned or ignorant in proportion to their knowledge of his works. The destruction of the Alexandria introduced learning among the Arabians but they made little progress in the knowledge of physiology. It was in Arabia that Chemistry was first regularly prosecuted and the first books we possess, professedly on this subject, issued from that country. After Mahomet had completed his devasting wars, an interval of repose, ensued, and the Arabians, commenced their enquiries in the medical Science with the eagerness and avidity that had formerly actuated the Greeks and Egyptians. About the twelfth century, the Saracen School became totally extinct and

from that time to the fifteenth century - a period of
300 years the whole world seems to have lain involved
in the deepest gloom of ignorance. However about the
middle of the fifteenth century a brighter era sprang
up, which in its ultimate Effects produced greater a-
dvantages to the Science of Medicine, than any
thing that had hitherto occurred. It was at
this period the art of printing was first introduced
which afforded more ample means of disseminating
learning and the various departments of Science and
Philosophy received an impulse in the relish that
was excited for the treasures of literature. The works
of Galen and Hippocrates were read with avidity
and a universal ardour prevailed for the acquisition
of knowledge in all its branches. The beginning
of the Sixteenth Century gave rise to two other
descriptions of men, the Chemists and the a-
natomists. The first of these was Paracelsus who
endeavoured to connect the two Sciences of
Chemistry and Medicine. The speculations of this
man however were wild and unfounded. He a-

violently opposed the Galenic School, and endeavoured to supersede them by his own discoveries. At his death his theory fell into oblivion, but the pursuit of Chemistry in the explanation of the phenomena of disease, still continued a favorite pursuit, during the Sixteenth and Seventeenth Centuries. The Theological doctrines of the times likewise occupied the attention of many learned men, such as a belief in the influence of the heavenly bodies, the supernatural agency of various kinds of animals &c yet notwithstanding these obstacles to improvement the progress of the medical Science was unimpeded. This advancement was greatly assisted by the successful discoveries of the Anatomists, whose researches during this Century (the Sixteenth) were diligent and unceasing. Vesalius was the first who took advantage of this spirit of inquiry and may with propriety be styled the Restorer of anatomy, being the first who dared to expose the errors of Galen in Medicine and Anatomy by referring to the Human Body. Human dissections were not allowed in this age, but

Vesalius zeal for Medicine induced him to brave every
danger to which he was exposed, by clandestinely
procuring bodies for dissection. About this period
the philosophy of Aristotle received its gradual
downfall, which before had reigned predominant in
the School of medicine. Lord Bacon's philosophical
researches, now pointed out the true and proper
method of investigation and in connection with
his efforts were those of Descartes, who tho' pursuing
different course of study and devoting his attentions
a different train of pursuits still contributed, finally
guide the progress of philosophical enquiry into
its proper and legitimate channel. This spirit of
research extended itself into France, Italy and
Holland, afterwards into some parts of Germany,
and lastly into England, where from the prevailing
spirit of Theological and political disputes it did
not keep pace with the rapid improvements it
experienced in the other nations of the Continent
During this period from the revival of Letters to the
commencement of the Seventeenth Century the
knowledge of medicine was rapidly advancing and

assumed at every step, a more scientific form. The two rival sects the Chemists and Galenists, no doubt contributed much to this advancement by their frequent disputes and investigations. The refinement of the Chemical Medicine was so gradual an operation that it is impossible to ascribe it to any particular person. In this department the works of Sylvius and Willis are generally esteemed the most able and learned. An important part of Sylvius's theory was that acute febrile diseases depended upon the acid state of the humours and were consequently to be cured by Alkalis and in conformity with the usual custom of theorists, who always find those practices to be successful which favour their own speculations, he discovered that Alkaline medicines were the specific remedies for fever. He received many strenuous adherents to his doctrine particularly among the German and French Physicians. These were followed by what was termed the Mathematical Physicians who first appeared in Italy. Great advances

were now making in Astronomy, natural Philosophy and Medicine by the aid of Mathematical Reasoning and as the pursuit acquired popularity, it became the primary standard of dispute. This era gave birth to many distinguished and learned men whose extensive researches, and enlightened exposition added considerably to the general stock of Medical Knowledge, among these are Bacon, Willis, Harvey, in England, - Borelli, Bellini & others in Italy, besides numerous celebrated men who appeared in the French and German Schools. - About this period also appeared the celebrated Stahl, a native of Franconia and who passed the principal part of his life as Professor of Medicine in the University of Halle The doctrine of Stahl was probably derived in the first instance from the principles of the Cartesians, then in the height of their reputation. Hoffman another Professor in the University of Halle, likewise contributed.

greatly to the stock of medical knowledge, not only by his diligent and extensive researches, but in the very liberal manner by which he fostered the spirit of free enquiry among his pupils, while from time to time he produced numerous and able works on Medicine, especially his great practical treatise, The System of Rational Medicine. Contemporary with Stahl and Hoffman was Boerhave, a man equal to either of them in the general powers of his mind, and superior in learning and information. His acquaintance with Chemistry and Botany was very extensive, which enabled him to lecture on these subjects, with the highest success and reputation to himself. No one ever enjoyed greater fame as a teacher; and from this circumstance, as well as from the intrinsic merit of his lectures his Doctrines acquired a degree of ascendancy over the public mind which has scarcely been attained since the time of Galen. Had Boerhave lived at a period when the progress of the Human Mind was less rapid, and when a spirit of inquiry and of philosophical research was unknown, it is probable, ~~indeed~~ that the influence of his opinions might have been as extensive and as

durable as those of Galen. With this illustrious character we shall conclude the second era in the history of Medicine, during which period we find the gradual increase of knowledge, succeeding in throwing off the fetters of superstition and ignorance and the state of science gradually progressing towards a state of method and refinement.

The third Epoch in the History of Medicine, commencing at the middle of the eighteenth century, though not distinguished by any particular occurrence, as in the two former divisions, still the state of Medicine during the last sixty or seventy years has undergone changes, which amply entitle this period to a seperate and distinguished view, in the general divisions. If we characterize the last as the age of learning, we regard this as the age of observation and experiment. During the period of which we now treat, a great variety of speculations and doctrines were brought forward: and number of Medical writers appeared, who are generally arrayed and under five heads - First, The Metaphysical

Physicians, who received the appellation of Animists or Spiritualists, men who adopted Stahl as their head, and whose opinions they of course adopted. nearly allied to this sect we may rank the vitalists men whose principal object was to investigate the phenomena of life, proposing to ascertain the laws of the animal economy, by actual observation, thus discovering what are the appropriate powers or qualities of the living body, and in what respect these powers or qualities differ from those inanimate or unorganized matter. In the third class we may place the Eclectics, including the disciples of Boerhave those who anxious to pay all due deference to their predecessors derived their doctrines from the collected opinions of others, rather than deduce them from original observations. The fourth class were more attached to the doctrines of Sylvius and Willis who taking advantage of the discoveries made during the 17th century endeavoured to apply them to the explanation of the phenomena of pathology and therapeutics. With some modification differing from the rest in the restrictions which they imposed upon

the superintending principles of Stahl, the fifth source originated, a large and respectable sect to whom the name of Semianimists has been applied. Among the most conspicuous of this class was Whyt a Scotchman - He wrote in opposition to Haller, with whom he engaged in rather a warm and acrimonious controversy, respecting the nature and causes of the vital motions of the body. To this sect also belongs Sauvages one of the professors in the School of Montpelier. He was the first to arrange diseases into classes, genera and species, and his nosology tho' superseded by later attempts of the same kind and by the general increase of knowledge, yet it must be regarded as a work greatly conducive to the promotion of medical knowledge - Among those who have made Medicine their chief source of study. No man in modern times has acquired greater celebrity than Cullen, who was likewise a Scotchman and for a long series of years he occupied the medical Chair in the University of Edinburgh he as a man of shrewed and penetrating Genius of

extensive reading and general knowledge. Nevertheless some of his speculations have been discovered to be fallacious and have consequently sunk. As we may confine our observations to a certain limit, we have no need to notice many illustrious names, who have directly contributed to the improvement of the Science, but briefly observe that the last century thro' their instrumentality has nearly perfected our knowledge of medicine. Every Nation has produced men of the greatest eminence - the names of Cullen Darwin, Brown, Bell, Munroe, * Bichat, Rush form but a small number of those who have enlightened the Science of Medicine in the ighteenth century. In this brief sketch, it is unnecessary to enter into any lengthened details the various pursuits of the many eminent men who yearly rose up among us - Suffice it to say hat fortunately for Mankind their efforts are rowned with success, and that the branch of edical Science is become an indispensable study

over the civilized world - We have every where
distinguished teachers, who are daily adding to the
stock of useful information. But before I conclude
I cannot refrain from mentioning particularly
the distinguished eminence of the Professors
of the University of Maryland, their scientific
attainments, indefatigable industry and
persevering labours in their respective Pro-
fessorships command our admiration &
secure our attachments. Here they have raised
a Medical school from its Infancy and
cherished it with unremitting attention &
Parental affection. It is an object of de-
lightful consideration, that their labours
have been crowned with merited success.
Their knowledge of Science, elevated & exten-
sive, has been diffused over the minds of
the students with singular perspicuity, &
the lights of their scientific acquirements clear
& convincing, shine around them with
an attractive lustre - What immortal
honors are due to Professors of such high
characters, who have devoted so much

talents & industrious efforts to render the school of Medicine in Baltimore so useful & dignified, & bring Medical science & learning home to the door of every aspiring student. — May laurels of fame ever bloom around them, & may the hearts of the students be filled with the warmest gratitude for the many advantages which they derive from the instructions of Professors so much fame, renown & glory. —

John H. Jones

March 20th 1825

Inaugural Dissertation

On

Apoplexy

Respectfully Submitted To

The Examination Of The

Provost Trustees And

Medical Faculty Of The

University Of Maryland

By

M: Burton

Of Richmond

Virginia

e term apopleyia was usea by the ancients, and is still used,
denote a disease in which the patient falls to the ground,
n suddenly, and lies without sense or voluntary motion.

Dr Cullen defines apoplexy to be that disease in which
whole of the external and internal senses and the whole
the voluntary motions are in some degree abolished, while
spiration and the action of the heart continue to be
rformed. By its being an affection of the whole of the
wers of sense and voluntary motion, he says we distin-
ish it from palsy; and by its being with the continu-
ce of respiration and the action of the heart it is
tinguished from syncope.

Mr Good says, apoplexy is mental and corporeal torp
de with pulsation and oppressive, mostly sterterous
ep.

Although sterter is generally included in the
inition of apoplexy, some nosologists contend that the
ease may exist without this symptom, Cullen says "
sterterous breathing is not always present, even in the
st complete form, or in the most violent degree of the dis-
se.

Apoplexy is thus defined by Cooke: It is a disease
which the animal functions are suspended, while the
al and natural functions continue; respiration being

nerally laborious, and frequently attended with Stertor,

The attack of apoplexy is sometimes sudden; some-
es we are warned of its approach by the following
mptoms; a dull pain in the head, accompanied by
sense of weight or heaviness; vertigo; drowsiness; involu
ary contractions of the muscles of the face; cramps or
asms in various parts of the body; inspirations
oper than natural; fullness and redness of the counten
nce and eyes; obscurity or irregularity of vision; bleed-
g from the nose; singing in the ears; faltering in speech
using one word for another; loss of memory; and dimin-
hed sensibility of body or mind, or of both,

In the fit the patient falls to the ground, and lies as if
a deep sleep, from which he cannot be roused,

In the perfect or strong apoplexy, the respiration of the
atient is generally much impeded; but although labo
ous, it is often, in the begining of the paroxysm, slow
nd regular; in the middle, and towards the end, when
e disease terminates fatally, it becomes frequent, weak, and irre
ular,

The laborious breathing is very frequently accom-
anied by Stertor; and some physicians contend, that this
mptom is absolutely necessary to constitute apoplexy, whilst

ers maintain, that although an usual symptom, the disease
ay exist without it.

In the strong apoplexy, a frothy saliva or foam is
equently excreted from the mouth, which is sometimes blown
ay from the lips with considerable force. This symptom
s been noticed by almost all writers on apoplexy, and has
some been considered indicative of a violent disease.

In this disease the pulse, at first, is said to be regular, strong,
ll, and slow; but as the disease advances, it becomes weaker
d more frequent; and in the end, irregular or intermitting.

The face and the whole body are sometimes cold, and bedewed
th clammy sweat; but more frequently the temperature of
skin is higher than natural, and is accompanied with
vious perspiration.

The eyes in this disease, are described as being prominent
odshot, sometimes half open, but more frequently quite closed;
cornea dull and glassy; and the pupils dilated. Cooke says
the generality of cases, the pupil of the eye is indeed more
less dilated, but sometimes it is greatly and permanently con
racted.

The teeth are often closely locked together; and deglu
ion is generally so much impeded, that fluids which have

en forced into the mouth, return by the nostrils,

When apoplexy terminates fatally, as the disease proceeds the
tition of sense and voluntary motion seems to become more complete,
respiration and pulse more weak and irregular, cold clammy
eats affect the face and the whole body; the features shrink, and
nulsions supervene, which terminate in death,

The duration of a fit of apoplexy is various, It is said to
t generally from eight to twelve, twenty four, or forty eight hours;
metimes for a still longer period. When apoplexy does not prove
tal, it usually terminates in a greater or less degree of palsy;
y frequently in the palsy of one side, which is called hemiplegia,
d which is almost always on the opposite side of the body
om that of the brain, in which the effusion of blood has
ken place,

The causes of apoplexy may be considered as they predispose
ender persons liable to the disease, and as they excite or actually produce

Advanced age is said to predispose to apoplexy, The disease may
ppen at any time, but it seems most frequently to happen about
e middle or in the decline of life. Persons of a plethoric habit, esp
cially those who have short thick necks, and who indulge in
ting and drinking, and sleep, are predisposed to this disease.
r Cullen thinks that corpulency and obesity operate much in the
oduction of apoplexy, by occasioning a more difficult transm

ion of blood through the vessels of the lungs. It appears," he says,
at in fat persons, from the compression of the blood vessels in
any parts of the body, the vessels of the lungs are thereby kept
ry full, so that upon the least increase of bodily motion which
nds the blood faster into the lungs, a more difficult and freque
nt respiration becomes in such persons immediately necessary.
This shows that in such persons the blood is not freely trans-
itted through the lungs, a circumstance which, as in other inst
nces, must give a constant resistance to the return of blood from
vessels of the head, and therefore favors or occasion an accum
lation of blood in them.

The exciting or occasional causes of apoplexy mentioned
authors, are very numerous, Among them are enumerated
ood; serum; tumours; hydatids; polypus concretions; ossific
tions; exostoses; and various lesions of the brain. These
uses are said to act by producing pressure on the brain,
hich is supposed to be the most common immediate cause
the disease; and they may be divided into such as act
uickly and powerfully, and those which act more feebly and
radually, in producing this pressure; the degree and duration
the disease, being proportioned to the degree and duration of
pressure. In the strong sudden apoplexy, attended with
tertorous breathing, the exciting cause is, almost always, an
fusion of blood, because we can easily understand how by
e rupture of a considerable vessel in the brain, an effusion

fficient to occasion a sudden and great pressure may take
ace, and because on examination after death we almost always
tually find such effusion. In those cases in which the disease
mes on gradually, and with symptoms warning us of its approach
e cause, in the generality of cases, may be suspected to be either
ood poured out slowly from a small vessel, or serum gradually
fused. In either case, if the effusion goes on, the full apoplexy
ay be produced; but it is difficult to conceive how serum
uld be effused so quickly as to produce the sudden disease;
d in fact the sudden apoplexy seems always more or less
nected with an effusion of blood. Effusions of blood, and also
serum, may with propriety, be considered as exciting causes of
oplexy; but tumours, hydatids, &c which are of slow form
ion and growth, can only be admitted into the list of remote
uses. They may give occasion to headache, vertigo, lethargy,
pidity, blindness, convulsions, &c and they may, by their increase
time, produce apoplexy, but not the sudden disease.

A slight temporary apoplexy seems sometimes to be occasi
ed by pressure arising from a distension of the vessels of the
ain, by an accumulation of blood in them, independently of
fusion.

Although an effusion of serum may give occasion to
oplexy by pressure, yet there can be little doubt that an effusion
blood is, in a very great proportion of cases, the exciting cause
the sudden strong disease. Effusions of blood are, very genera

, either the consequence of great determinations of that fluid to the
ad, or of impediments to its free return from the head; whatever
erefore may operate in either way may be reckoned among the
ne distant exciting causes of the disease. Of these we have a great
riety; such as violent passions of the mind, violent exercise of the
dy, fits of intemperance, excessive straining, long continued
oping, ligatures, tumours compressing bloodvessels, congestions
great cold, and the suppression of evacuations to which the body
s been accustomed.

Over distention and effusion giving
casion to apoplexy, may also, as Dr Cullen has stated, be
oduced by causes that operate by preventing the free return of
ood from the venous vessels of the head to the right ventricle of
heart; such as stooping with the head down, or other situation
the body, in which the head is long kept in a depending
ce; and in which the gravity of the blood increases the efflux
it by the arteries, and opposes the return of it by the veins; a
ght ligature about the neck, which compresses the veins more
ongly than the arteries," &c

In addition to the various causes
pposed to act by pressure, authors have mentioned in the list
causes of apoplexy several others, concerning which physiologists
e differed in opinion, both as to the mode of action, and the nature
the disease produced by them.

The chief of these are opium and other narcotics; certain vegel
le poisons; alcohol, and other products of distillation; mephitic

ases; and deleterious fumes or vapours, such as those from burning
harcoal, or from quicksilver, lead, and other metalic substances.

Physiologists both ancient and modern, have very generally
nsidered the immediate, or proximate cause of apoplexy to be an obst-
uction of the passage of the nervous fluid into the organs of sense
nd motion. Dr Cullen says the proximate cause of this disease
ay be in general whatever interrupts the motion of the nervous
ower from the brain to the muscles of voluntary motion, or in so
ar as sense is affected, whatever interrupts the motion of the
ervous power from the sentient extremities of the nerves to the brain, such
interruption of the motions of the nervous power may be occasioned either
some compression of the origin of the nerves, or by something destroying
e motility of the nervous power.

Apoplexy, says Good, is strictly a disease of the nervous sys
m, dependent upon a suspension of the sensorial power in almost
l its modifications, sentient, percipient, and motory, with the
ception of a certain portion which still continues to be supplied
the involuntary organs; the faculties of the mind participating
the torpitude of the body. He says also, that apoplexy is, by almost all
iters on the subject, regarded rather as a disease of the sanguiferous than of
nervous system; the morbid action of the latter being supposed to be
irectly dependent on that of the former, and consequently only a secon
ary affection.

This view of the subject, he says, is too limited; for
hough in most cases the more prominent symptoms concur

9

with the appearances on dissection in leading us to compression of the brain as the primary cause of the disease, yet we have reason to believe that the nerves are originally in fault, for it has been noticed that a variety of affections of the head attended with forcible and severe compression, as inflammation and dropsy of the brain, have run their entire course without any mark of apoplexy whatever; to which should be added that, whilst in most other lesions or diseases accompanied with compression of the brain, and a suspension of sentient and motory power as a consequence, such suspension ceases almost the moment the compression is removed, when the nerves of feeling and motion, together with the faculties of the mind, resume their wonted activity, and since no disposition to a relapse; in apoplexy on the contrary the result is always doubtful; for a palsy of some part or other is a frequent and permanent effect, or the mind suffers in some of its faculties, and a relapse is greatly to be apprehended. So that though compression of the brain, and particularly from a morbid state of the sanguineous and respiratory functions may be justly regarded as the ordinary efficient cause, there seems to be at the same time some peculiar debility or other diseased condition of the sensorial system to which apoplexy is primarily to be referred, and without which it might not take place; though whenever such a morbid condition exists, compression, from whatever cause will be sure to produce the disease

Under the treatment of apoplexy may be pointed out, first, the means to be employed when symptoms appear threatening an apoplectic

attack; secondly, the mode of proceeding in the paroxysm of the disease; and lastly, the remedies to be used on recovery from the disease, with a view of preventing its return.

When fullness and redness of the countenance and eyes, drowsiness, vertigo, and the other symptoms formerly described, are observed, means must immediately be employed to prevent, if possible, an apoplectic paroxysm. These symptoms are generally produced by a too great fullness of blood in the head, and with a view to lessen this fullness, blood-letting, purging, &c have been recommended. Under these circumstances the greatest reliance has been placed on bleeding. The quantity of blood to be taken should be regulated by careful observation of the age, constitution, and strength of the patient, and the apparent urgency of the case. In a plethoric habit, and strong constitution, especially if the warning symptoms be urgent, blood should immediately be taken away, both generally and locally. In some cases of this kind, the opening of the temporal arteries or jugular veins has been thought advisable. In old age or considerably advanced life and feeble constitutions, caution ought to be observed in the evacuation of blood, but even under these circumstances, if the symptoms be urgent, we should not hesitate to recommend cupping, either on the neck or the temples.

Although, with a view to prevent the accession of apoplexy, we chiefly rely on bleeding, other means ought not to be neglected, such as a low diet, and whatever tends to promote the tranquility both of body and mind. Great advantage has often been derived, under these circumstances, from the administration of cathartics of

speedy operation and stimulating glysters. Some recommend fomentations, or rubefacients of a powerful kind, such as sinapisms, to the feet and legs.

In the actual paroxysm of apoplexy the patient should, if possible, be immediately carried into a spacious apartment, into which cool air may be freely admitted. He should be placed in a posture which the least favours determination of blood to the head; all ligatures, especially those about the neck, should be speedily removed.

Copious and repeated bleeding seems to offer the most rapid and effectual remedy we can have recourse to; yet the opinions of the best practitioners in the different ages have been at variance as to the propriety of this remedy, but since dissections have thrown more light on the pathology of this disease, blood-letting is regarded as an indispensible remedy. A question has been made, also, as to the side from which the blood should be drawn, some contending that it is most advantageous when taken from the sound side (when that could be distinguished) others from the diseased. It is now regarded as a matter of no importance from which side the blood is taken.

General and local bleeding should go hand in hand; and the quantity drawn should in every instance depend upon the urgency of the symptoms. Dr Cullen and many other writers have recommended that the opening should be made in the temporal artery or jugular vein. "In all cases of a full habit," says Dr Cullen, "and when the disease has been prece-

ted by marks of a plethoric state, blood-letting is to be immediately employed, and very largely. In my opinion, he says, it will be most effectual when the blood is taken from the jugular vein; but if that cannot be done it may be taken from the arm. The opening of the temporal artery when a large branch can be opened so as to suddenly pour out a considerable quantity of blood, may also be an effectual remedy. It is a matter of no importance from what part we take blood, provided we take enough, but the arm is generally selected because it is more convenient, and because we have the flow of blood completely under our control.

The next important remedy to be employed is that of exciting the bowels by active purgatives, and thus endeavouring to lessen the pressure on the brain.

The particular purgative is of no importance; whatever will operate most speedily and most effectually is what should be prefered in the first instance; and hence a combination of calomel and jalap will be found among the best; though a free action may afterwards be maintained more conveniently by colocinth or sulphate of magnesia.

In the treatment of apoplexy, some writers employ stimulating remedies externally, such as volatile alkali, camphorated liniment, with tincture of cantharides, &c in order to excite the patient to sense and motion; &c Cullen says "it has been usual with practitioners, together with the remedies already mentioned, to employ stimulants of various kinds; but I am

disposed to think them generally hurtful; and they must be so, whenever the fullness of the vessels, and the impetus of the blood in them is to be diminished. Upon this principle it is therefore agreed, that stimulants are absolutely improper in what is supposed to be a sanguine apoplexy; but they are commonly supposed to be proper in the serous. If, however, we be right in alleging that this also depends upon a plethoric state of the blood vessels of the brain, stimulants must be equally improper in the one case as in the other.

Purgatives should, if possible, be given by the mouth; but in the strong disease it often happens that the teeth are nearly closed, and the power of swallowing is so much impaired, that it is extremely difficult to introduce any thing into the stomach. Under these circumstances medicines in a fluid form may sometimes be administered by means of a syringe, care being taken to avoid the danger of any part of the fluid getting into the trachea. Should we fail in our attempts to introduce medicines by the mouth, we should have recourse to purging clysters.

The collateral remedies are of less importance though some of them may add to the general effect. Emetics once prescribed in this form of the disease are improper unless it is when the disease has evidently proceeded from a surcharged stomach, and even then perhaps it would be better to produce emesis by blood letting.

Blisters and sinapisms promise nothing in this form of the disease; they tease and irritate to no purpose applied to the extremities, are still more injurious when applied to the head; for they effectually prevent the application of cold water, or vinegar, or pounded ice, which afford a rational chance of producing benefit. Stimulants and cordials of all kinds should be sedulously abstained from.

On

Inaugural Dissertation

on

Gonorrhoea Virulenta

Submitted to

the Examination of the

Right Revd. James Kemp, Provost

& the Medical Faculty,

of the

University of Maryland,

for the degree of

Doctor of Medicine,

by George Moore, of Lancaster Pa.

The name of "an Inaugural Dissertation" presents so unpromising an aspect, that few will expect to be rewarded in the perusal, by any thing novel - The Youth & want of practical experience of such authors generally, render their productions, merely a collection of the sentiments & opinions of those who have preceded them - Those who may entertain different expectations, will be disappointed in an essay like the present - The writer lays no claim to originality, the selection & arrangement of opinions obtained from various sources, which appear to him, to be

most consistent with reason, constitute the sole
whole claim to the character of an Author.
His pretensions being so humble, Criticism
must be disarmed & his essay with all its
imperfections received with lenity.

The subject of the succeeding pages
is a brief enquiry into the origin & cause of
Gonorhoea, with an account of the symp
toms & method of cure. The consequences
of improper management in the disease, with
the manner of obviating their evil effects, will
conclude this probationary essay.

The manner in which Gonorrhoea Virulenta first originates, like the origin of many other specific diseases, appears to be veiled in obscurity - The opinion advanced by many that it is a modification of the Venereal disease appears to be successfully controverted by the single fact that Mercury when exhibited in the one produces its antidotal influence, whilst in the other a mercurial action aggravates all the symptoms - Again - If these two varieties of the same disease we might reasonably suppose they would reciprocally produce each other - That this is not the fact experiments have proven, for in no instance could the Matter of Chancre when injected into the urethra be made to produce Gonorrhoea, or the Matter of Gonorrhoea when introduced into the system - to cause the symptoms of Chancre -

A different opinion has been maintained on the same subject which appears to be better supported - viz - That this disease first

arises from want of attention to cleanliness, producing a irritation of the natural secretions of the female organs & that from thence propagated by contact -

If we consider that in the present day it is found to be produced by a like cause, we will not find much difficulty in admitting that this theory of the origin of Gonorrhoea, had at least the grounds of probability to support it -

The learned professor of practice in this University, during the recent session cited a case which occurred under his own observation, where the disease was generated between a gentleman & his wife within a few days after marriage - the moral purity of the parties in this instance was unsuspected & yet we find the husband laboring under a gonorrhoea produced by a vitiated vaginal secretion - This is not a solitary case; our authorities mention the appearance of

gonnorheal symptoms, from connection with a woman, who was laboring under Fluor Albus -

The Secretion of the Matter being thus shown we will now endeavor to show the manner in which this reaches the inner part of the Urethra of the Male to make its impression -

Whilst the Penis is in a State of erection the Orifice into the Urethra whose lips are everted - upon this again collapsing - the Urethra Contracts & draws the Matter about it as well within the Canal - where it appears to exert its first influence -

The first Symptom discernable after infection is an itching of the glans Penis, follow ed after it has continued sometime by pain, the Penis becomes swollen, the glans especially being red & shining - a discharge of Matter may be observed upon pressing the Glans, which increases in quantity as the disease progresses -

This discharge which on its first appearance re- sembles Whitish pus, changes to yellow & as the in=

flammation increases becomes greenish & is thinner & more acrid - A frequent desire of micturition, the passage of the urine being attended with a scalding sensation - The inflammation increases viz in some cases produces troublesome chordee this symptom is to be relieved by cold applications & the use opium - Phymosis & paraphymosis are also the frequent result of the inflammatory action & are to be treated as symptoms of the general complaint - Sometimes when the usual methods of reducing inflammation are unsuccessful 'tis necessary to remove them strictures by the use of the knife - These symptoms above enumerated constitute all those usually observable in a regular case of Gonorrhoea - When others make their appearance, they are to be referred to neglect or misapplication of Art.

In speaking of the treatment - The indications are clear - The patient should be strictly enjoined to rest & cleanliness - Saline purgatives, with occasionally the use of the Lancet are all that is requisite until the more highly inflammatory symptoms

are removed - Terebinthinate preparations are then useful from their Medicating the Urine & affording a Balsam to the irritated surfaces.

As to local applications the free use of Soap & Water will supersede the use of all every others

Before taking leave of the subject it will be proper to notice a practice which has at this day many advocates - I allude to the indiscriminate use of Injections, which appear to be productive of but little benefit & when used of an astringent quality during the highly inflammatory state are productive of much mischief. The discharge may be thus suspended, yet the unfortunate patient who upon confidence in their use, will frequently find a greater evil, exchanged for a greater - Strictures & Diseases of the Prostate Gland are often found to succeed the employment of these measures - -

Stricture of the Urethra, one of the consequences of Gonnorhea, will generally be first noticed by the difficulty experienced in evacuating the contents of the bladder - The Urine not being able to be passed at all, or the stream

very much diminished in Size —

Many methods have been proposed for their removal, the most prominent of which are bougies, either Simple or armed with Caustics —

The use of the Simple bougie is often productive of the most decided advantage, overcoming the Stricture & restoring the parts to a healthy actions — The use of the bougies should be discontinued or when it is found to blunt the Sensibility of the part, but when we finds that it has a contrary tendency & that each successive introduction of the instrument, produces increased irritations, it should be discontinued, at least for a time —

The Caustic Bougie is at present considered, by many eminent Surgeons, to be inadmissible, from the difficulty occurring in the detaching of the Caustic, which frequently becomes disengaged & causes fistulous openings in the Urethra, which are irremidiable without the aid of the Knife —

A new method of operating for the purpose of effecting a permanent cure for

structure, may be seen detailed by Dr Jamieson, of Baltimore, in the 7th Volume of the Medical Recorder pages 251. & 687.

His mode of operating, illustrated with a number of successful cases, together with his theoretic speculations on the subject, may be found upon referring to that work.

From the simplicity of the operation & the little danger attendant on it, it will I think in the course of time, be found to supersede all other plans of relief.

The next consequence of suppressed Gonorrhœal discharge, of which we shall speak, is Hernia Humoralis.

This disease appears to be owing to the translation of the inflammation to the substance of the Testicle, which will be found much increased in size, with a dull pain extending from the gland, through to the Lumbar region.

Fever, with great Nausea & nausea are also attendant Symptoms of this disease.

Our indications of cure are to minister the appearance of the discharge, & to combat the inflammation

The first of these may sometimes be effected by the vapour of warm water, or an emollient cataplasm applied to the penis. The second indication requires the use of the Lancet & purgatives, particularly of the Saline Character — Emetics have been also very highly recommended as assisting in the discussion of the inflammation — Anodynes may be employed to alleviate pain — The patient should be confined to bed & kept perfectly cool: the part to be supported by a bandage. A solution of Acetate of Lead or any other cooling application, may be employed as a Lotion —

When notwithstanding all our endeavours, suppuration appears inevitable, this process should be promoted by the use of warm cataplasms & when the matter is fully formed it should be evacuated by the use of the Lancet, taking care to avoid wounding the Testicles

The next consequence of which we shall treat, is inflammation of the Prostrate Gland;

this will be found to occasion symptoms similar
to those produced by Stricture & is the best for-
midable of all the Consequences of Gonorrhoea.

The remedies for the removal of this complaint
are the energetic employment of depleting measures,
When these fail to produce resolution, we find for
the most part a Physconious enlargement of the
Prostate, to be the result, as this flammation of this
gland seldom terminates in Suppuration.

Fistula in Perineo is the result of the suppu-
rative process, which requires for its removal an
operation.

The use of Setons in Perineum have been very
strongly recommended in enlarged prostate; they have
been productive of Service as long as the irritation has
been kept up externally, but upon permitting the dis-
charge to cease, a return of the Symptoms have
always been experienced.

Sympathetic Buboes, are the last
subject of our notice. These affections arise like
most of the others, in Consequence of the translation
of the inflammation to the inguinal glands & have

nothing specific in their nature, to render the treatment different from that required by inflammatory affections from any other cause — —

I have now offered all I have to say on this subject, though I feel satisfied, I have not entered as deeply into its consideration, as the nature of the disease admitted. — The want of time properly to digest the matter which the subject affords, is my only apology

A Dissertation,
on the
General Doctrine of Inflammation.
Submitted to the examination
of the
Provost,
Trusteese and Medical Faculty
of the
University of Maryland,
for the
Degree of Doctor of Medicine
by
Daniel H. Lawrence
Member of the Medical Society
of
Baltimore.

Baltimore March 9th 1832.

To

John M. Howland, M.D.

The

Following pages are inscribed.

With

Every sentiment of respect

and gratitude,

By his

Obliged Friend,

and pupil.

The Author.

of
nflammation, (this term is derived from the word inflamm'o
burn.) The term inflammation, has long been employed, by gen-
men of the Medical profession; to denote the existence, of an
usual degree of redness, pain, heat, and tumefaction; in any
the tissues which, enter into the composition of the Human body.
simultanious Occurence of these four morbid phenomena; when
sent, in any considerable degree; or, when they effect, very sensible
rts; are attended with fever, or, general disturbence of the system;
d hence the distinction, among the symtoms of inflammation; and
inflammatory diseases, into those which are local, and those which
febrile, or, constitutional. - The susceptibility of, the body for
flammation, is of two kinds; the one original, constituting part of
animal economy, and beyond the reach of human investigation;
other acquired, from the influence of climate, habits of life, and
te of the mind, over the constitution. - The first kind of suscept-
ility; being inate, cannot be diminished by art. - The second, ma
be lessoned, by the mere avoidence, of the particular causes, upon
hich it depends. - The red coulor of the skin, in inflammation,
ms to have suggested to the Greeks, (to whome we owe so much of
nomanclature of Science;) the resemblence of this state, to flame,
d hence the terms, "phlogosis, and phlegmony," in the same ma-
ner as the increased warmth of the skin in fever, seem to
ve suggested, the similarity of that state to fire; - and hence
obably; the terms Pyretos, of the ancients and -

rexia of the modern physicians.- But inflamation and fever, words, so nearly allied in their primitive, and figurative significations; are now to be regarded, as terms purely technical:- neither intended, nor fited, to express any thing relative to the nature, causes, particular combinations; or distinguishing Characters of the two distinct, and very dissimilar terms, of morbid Phenomina;- the occurence of which, they are respectively imployed to indicate.- Inflamation is divided into, healthy, and unhealthy; the propriety of this division is questionable.- Inflamation, does not appear to be a natural condition of the part; let it occour where it will:- Then if it is admitted to be, an unnatural condition, it cannot be healthy.- But if admitted, we would say, that healthy inflamation, can be only one Kind:- though divisible into different Stages:- of the second, there must be an infinite number of Species, according to the peculiarities of different constitutions, and the nature of diseases. "which are numberless".- But if it is meant, by healthy inflamation, that condition of things, in which, there appears no untoward symptoms, the term is admisable,- as it is in contradistiction to an unhealthy condition of the inflamed parts.- Another general division, is, into common and specific inflamation, the latter term, implying, that the affection has some strongly marked peculiarities about it: rendering it in some degree independent of such circumstances as would controle and regulate the progress of common inflamation.- Such are, Venereal, Varicelous, Vaccine,- Erysipelatous, Goutey, and rheumatic inflamations.- However some of the principle Writers, Brousais, and some others; are inclined to think there are no specific disease, and think they can treat those diseases called Specific

th equal success, and on the same principles adapted in com-
mon diseases;- with respect to the propriety of this assertion, I do not
feel myself prepared to say.- Inflamation, may also, be divided into
the accute, and chronic Variety. This division, appears to be one of very
long standing; and has been generally adopted by surgical writers.-
As, healthy inflamation is rapid in its progress, it must be ranked
as, an accute species, of this affection.- In the accute variety, it
runs through its stages with great rapidity.- but, in the chronic variety,
it is much more tardy in its progress, and difficult to combat.- the
action in the part is not near so great, nor is the treatment so rigerous.
ut, there are numerous inflamations controlled by a diseased principle, whe-
are quick in their progress; therefore are to be considered as acute.-
he arrangement of inflamation, into adhesive, superative, ulcerative, and
ngrenous; does not appear altogather justifiable, because it is, merely
ounded on the modes, in which, either different, or in some instances,
he same kind, of inflamation terminate.- Mr. James. attempts an
arrangement, of the kinds of inflamation, according to the different
elementary tissue, which they make their appearence in. as recomm-
ended by, Drs. Carmichael, Smith, Pinel, and, Bochat.- The tissues
under consideration, are five; and the doctrine supposes, that the
inflamation of each tissue, is essentially different.- The first is that,
of the phlegmonoia Variety, which is seated in the cellular tissue, and
the parnechymatous visera. The seccond division, is that of inflamation,
in the serous membranes;- The third division, is that of mucous membrane

the Fourth, which is named erysipelatous, is seated in the Skin.- And the Fifth, termed rheumatic, belongs to Fibrous Structure.- But, the following Objections according to Mr. James, seeme fatal to this arrangment, if they are facts.- 1st. Different Kinds of inflamation are liable to occur in the same tissue. 2d. The same kind of inflamation, is often met with in different tissues.- 3. The same inflamation, may be transfered from one tissue to another. it being difficult to prove, he lays, little stress on it.- But difference of Structure, certainly, accounts for some of the varieties, in the appearence, and character, of inflamation; and as it will not explain, the principle diversities, of this affection:- we cannot admit it, to be taken as the basis of a nosological arrangment.- The common distinction of inflamation, at present in vogue, cannot at all be solved, by any reference, merely to texture.- Did this theory satisfy Mr. Hunter? no. what does he say? it is this, If it were true, we should soon be, made acquainted with all the different inflamations, in the same person, at the same time:- and even, in the same wound.— As an example, in an amputation of a limb,- where we carry the knife, through Skin, cellular tissue, muscle, and marrow; but instead of finding inflamation varying, according to these different textures; we find the same inflamation in them all.- However, Mr. Hunter assigns to this cause considerable influence, over every variety of the disorder. Experience teaches us the truth, of Mr. Hunter's remarks, Viz. that the Situation, position, Structure, functions, and distance of the part affected, from the source of circulation; make great difference

the symtoms, progress, and termination, of all inflamation. parts that are near the source of circulation, and have the blood freely propeled through them, resist disease better; and when it does attact them, passes through their different stages better.- The lower extremities are more subject to inflamation, and resist art more than those parts nearer to the heart; at least are longer in geting well, but we must recollect, that the dependency of this part, retards considerably the restorative principle in this part.- Hunter says healthy inflamation, is a pale red; when less healthy it is of a darker colour; but in every constitution, the inflamed parts will partake more of the healthy red, the nearer they are to the source of circulation.- When inflamation is situated in highly organized, and very vascular parts; they generally undergo a more favourable course,- and it is more under the control of art. Also, the nearer such vascular parts, are to the heart, the more favourably will they undergo inflammation.- Inflammation of the skin, cellular tissue, muscles, generally ends more favourably, than when, the same occurs in bones, tendons, ligaments, &c. it is also more under the controle of the surgeon;- I believe it is generally admited, that in those parts which are not vascular, the powers of life are considerably inferier, consequently when exited in a preternatural degree, frequently mortify.- But vital organs, though exceedingly vascular, do not undergo inflammation favourably. The reason Mr Hunter apigns is this, the natural opperations of universal health, depend so intimately upon their sound and undisturbed condition;- for instance, in

astitis peripneumony &c find, not only the functions of the organs, but also, the general system sympathise in a considerable degree.- as the vital powers of all new formed parts are weak, such as, tumours excresenies, cicatrices, callus, - they are not capable of undergoing any serious degree of inflammation; an attact of which, is said, either to cause them to mortify, or ulcerate.- "Inflammation, cæteris paribus, proceeds more favourable in strong, than delicate subjects.- In weak constitutions, the opperations of inflammation, are backward notwithsanding the part in which it is seated may, comparitively speaking; possess considerable organization, and powers of life." (Hunter) - That inflammation has a tendency towards the external surface of the body.- I believe is generally admited.- When inflammation attacks the socket of a tooth, it is on that side which is external; viz. towards the cheek.- In, (Fistula in ano,) the affection extends itself towards the skin of the buttock, leaving the intestine perfectly sound, although it is but a slight barier between it and the cavity of the intestine.- Suppose, a ball were to pass into the thigh, to within an inch of the opposite side of the limb, we would not find inflammation along the track, but on the side next to the sound skin.- The following may be, considered to be the termination, of inflammation, viz. resolution, effusion (of blood and serum,) adhesion, superation, ulceration, granulation, cicatrization, and mortification.- Dr Thompson, thinks that resolution is the only way strictly speaking, in which inflammation can be said to terminate; however this was freely spoken of in the first part of this chapter.- All parts of the body are not equally liable to each of the preceding consequences.-

the adhesive stage, takes place more readily, in the cellular tissue and in the circumscribed cavities, than the other Varieties. The Suppurative Variety, is more apt to take place in the mucous membranes, than the adhesive; it is, necessary for the inflammation to be of the most violent Kind, before adhesion takes place in the mucous tissue:- We see here a wise provision of Deity;- for if these tissues were so liable to the adhesive Variety,- death would occur more frequantly;- for if the outlet of the bladder, or intestinal canal, were subject to it, these cavities would be obliterated and death would be inevitable.- Though we have the adhesive variety, in some instances, as in anethretis, trachitis.- Every organized part of the body seemes liable to ulcerative absorption, but the cutanious and mucous textures, are the most subject to it.- Granulation occurs in most of the tissues, but the celluler is the tissue, in which it occurs most frequently.- In the muscular; it is not easily resolved, whether the muscular fibres of the part, or the cellular tissue alone, which is distributed so freely, among its fibres, is subject to granulation. The new flesh, or granulations formed between the divided extremities of the muscle, never puts on the appearences, nor exhibits, any of the distinguishing properties, of muscular fibre.- "It seems to connect muscular fibre togather, but never itself, seems to acquire irritability".- We have the best opperteunity of observing the progress of gangren in the cutaneous texture.- Although, the cellular tissue is very subject to mortification; yet, we seldom if ever; have an opperteunity, of observing the progress

the disease in the tissue, before it has passed into the state of Sphor
lus.- Symtoms, Nature, and causes of Inflammation.-
If we refer to any writer on this interresting topic;- we shall find,
the four following symptoms enumerated,- as Characterising phlegm-
on.- Redness, Tumefaction, Heat and Pain.- In Short, we understand
them to apply it, to a circumscribed tumour, attended with heat, redness,
tension, and a pulsatory pain.- If the above symptoms are slight, and
to no great local extent, Constitutional symtoms do not appear.- But when
they are more considerable, and the inflammation becomes extensive,
we have more or less, Constitutional symptoms: (sympathet. fever.) If we
examine the pulse, we will find it full frequent, and generally hard;
accompanied with, an incresed temprature of the body, thirst, diminis-
hed secretions; and other symptoms of Pyrexia.- While the inflamed
part becomes red, painful, and swolen,- its functions are likewise
impaired.- Although these symtoms; the local are not so manifest, when the
disease is internal, yet I believe, their existance is undoubted.- If we exa
mine those who have died of Peneumonia, we will find the air cells
of the lung, or lungs; considerably inflamed; and of course, we will
find a preternatural redness of these organs.- Coagulating lymph.
fibre) and even blood, extravasated in the substance of their viscera,
which becomes heavier, and feel more solid.- Whither the seat
of phlegmonous inflammation, should be limited to the Cellular
tissue alone, I am not prepared to say.- Sir A. Cooper remarks,
that this affection exists;- Whenever the capillaries appeared to be more

numerous and inlarged, than in the natural state;- accompanied with
an effusion of coagulating lymph, whether upon the surface of a membrane,
or a bone, or into the interstice, of the cellular tissue;-and attended with
acute pain; and a throbing pulsation in the part.- The causes of inflamm
ation, are divided into the remote, and proximate;- the term remote, is
not very well chosen; and the term exciting cause, is far more prefferable.
for the former comprehends all those agents, which contribute immediately,
as well as remotely; directly, as well as indirectly; to the production of the
affection.- The exciting causes, are divided into two, general claspes.- The
first, opperate by their stimulateing, or chemical qualities;- as Cantherides,
Oil concentrated, acids, alkalies, &c.- The second clasp are, those which act
mechanically, as bruises, wounds, splinters, bits of glass, &c. Fevers often
seem to become the exciting cause of local inflammation, in other instan
ces, inflammation appears to arise spontaneously;- or without any
perceptible exciting cause.- By the term proximate cause, pathol-
gists generally imply, that state of the part affected, upon which the
phenomina peculier to inflammation, immidately and primarily
depend:- or that phenomanon in the body, or part, immediately pre-
ceeding the state which we call disease;- without which previous phe
nomenan, the disease is not known to exist.- Most theories that have
been formed, tend towards the supposition; of their being some kind
of obstruction in the inflamed part.- Before the discovery of the
circulation by Harvey, the liver, was considered to be the center of the
vascular system;- from which the blood went forth by day to the

extremities, and returned again by night. If at any time pecant matter, should irritate the liver;- the blood was sent out more forcibly, and if at the same time, any part of the body were weakened, or otherwise disposed to recieve a greater quantity of fluid, than the rest, then a swelling was produced by the flow of humours to the part;- for it may be remarked, that physicians, at that time, were fully perswaded of the existance, and influence of different humours, and spirits, over the animal economy.- Boerhave belived in obstruction caused by a visid condition of the blood; and when this did not exist he believed their was an, error loci. Boerhave also taught that there was an acrimonious state of the fluid.- Dr. Cullen, believed in a spasm of the extreme arteries, supporting an increased action in the course of them.- Mr. Hunter, supposed that there was an increased action of the vessels:- did he mean by increased action, an alternate contraction, and relaxation in the vessels? or did he mean the action of dilitation?- I am inclined to believe the latter; although, some of his followers promulgate the former, as the meaning of this term.- "However there are but two hypothesis, which at present divide the opinions of pathologists, respecting the condition of the capilaries, in inflammation." Viz. 1st the inflamed vessels are in a state of increased action, second, that there is a diminished action, of the vessels of the part.- The most probable theory, is that of Doctor Phillipswix, Inflammation.

ems to consist in the debility of the capillaries, followed by an
ncreased action of the larger arteries.- Among the local symp-
ms, that were mentioned, I did not necessarily include, the pulsat-
ry sensation;- because, it is a symptom that does not always occur.
e, will now turn our attention, to the causes of redness, &c. 1st redness,
ay be caused either, by the distention of those vessels that convey red blood;
by the vis a tergo driving the red globules into those vessels, that natur-
lly convey a colourless fluide;- this increased dimention, in calibre of the
ssels, is readily ascertained, by injecting the vessels of a part, which in their
atural state would not admit it.- for instance, in an inflamed pleura pericstum,
. We may refer you to the well known experiments of Mr. Hunter, on the
r of a rabit:- we may likewise observe it, in our micrascopic experiments.
e intensity of this redness varies,- it may resemble the colour of arterial blood;
some cases it is dark;- in others again, it is of a purple or bluish hue.-
ain most likely, arrises from the extension of an irritable nervous filament.
then appears, that not only the sensibility of the inflicted part, is increased,
t also, its irritability:- thus pain may vary, from the slightest increase of
nsibility; to the most excruciating torment. Heat is caused by the increased
uantity of blood thrown into the part affected; and a chemical action that takes
lace, on the elaboration of coagulable fibrine;- and some have enumerated
mong the causes, that of friction;- admiting it were true, the degree of cal-
ic eliminated by this cause, would be so trivial, that it would not be per
ptible by any of our senses.- Mr. Hunter, denied that there was an in-
reased temperature of the part.- The artificially exited inflammation

the chest of a dog, and in the abdomen, rectum, Vagina of an ass;- and introducing the thermometer, he did not find that the temperature arose above that, of the temperature, of the blood of the heart.- Although, no increase of heat is perceived, when it occurs in internal parts,- yet when it occurs on external parts, where the temperature varies much, and is below 98° we sometimes perceive; a rising of 7 degrees of the mercurial fluid.

Treatment.

We should first, search for the exiting cause, and remove it if possible, as there is a greater quantity of blood, thrown towards the inflamed part, though in a state of health, we must, look for some remedy, that will diminish this determination of blood to the inflamed part.- If we were to arrange a list of remedies;- We would, take Venesection, as first in order, as it will accomplish this purpose most effectually, if judiciously imployed. Its beneficial effects arises from lessening the momentum of the circulation. (the vis a tergo) which keeps up the engorgement, in the debilitated capilary vessels. Sir. A. Cooper. believes it also acts benificially, by diminishing the nervous power, as is proved, by the syncope which it produces. V. Section, may be said, to be indicated, when the patient is strong robust and plethoric; Climate, season, age, sex, and prevailing epidemic, should all be taken into consideration.- a hard pulse, tense frequent pulse, a frequent pulse alone, does not in itself, indicate the propriety of Venesection.- A buffed nor a cupped condition of the blood alone, is not a sufficient indication for V. section and you must therefore take the concomitant symptoms, into due consideration, with the others.- If we were to take the aspect of blood drawn from one labouring under

urvy, and from pregnant females, as an indication for V.S. section.- we would be adly mistaken in our treatment;- for we find a buffed condition of the lood in these cases:- but some gentlemen think that there is inflammation, even ere, which escaped the observation of those gentlemen, who have made those ssertions.- Blood may be abstracted even if we have not a hard pulse, if the ther symptoms are violent; a small pulse should not deter us, if it is hard and ense, at the same time, as in Enteritis.- The quantity to be abstracted, should ary, with the degree of inflammation, importance of the region affected, nd the state of the constitution.- If we wish to produce syncope, which we should do, if the inflammation is considerable, or an important part is affected;- we should put the patient in the erect position, and make a large orifice, (either one, or more) a small orifice should not be made, because the system has time to accomodate itself, to the slow abstraction of blood.- The secretions should be restored, and the restoration of these, should ~~—~~ never be neglected; the secretions of the intestines, are to be restored, by purgatives.- the saline purge, as, sulphate of sodae, and magnesia, phos. sodae, sup. tart pot.- The diet should be of the most bland character, and in small quantities, t stated periods, (at the meal hours). for the progress of digestion should not e interrupted by giving food every two or three munits;- farinaceous articles, stale bread, arrow root, boiled rice, hard crackers, &c. The secretion of the liver, should be restored, by combining mercury with saline cathartics, &c.- The cutaneous transpiration should be restored, by antimonials, you may combine these different articles together as, calomel, antimony, and as the secretion of the kidneys are out of order, you may combine with these, squills, acetate of potash, &c. The nitro antimonial powder, is a valuable

medy, you may keep up a continstat nausea by it, or by Lobelia inflata, Ipicac, &c. - When the disease becomes chronic, it should be treated with the same remedies, only they should not be carried to the same extent; - The remedies should act in a slow and gradual manner on the secretions. - you may use Bill Hyd, Sule mur camp. - it will act on the liver, intestines and Skin, at the same time - Coros sub, Comp, Decoction of Sarsaparella. -

Local treatment of the Acute Variety.

Cold applications are often used, and are certainly one of the best remedies, that are used, Cold, Evap: Lotions, as Rectis Spirs of wine, diluted with water, Sulphur, Ether, this should be used with considerable caution; - for in some instances, it has produced considerable mischief, by too rapid evaporation, and consequently, a too rapid reduction of the tempriature of the part. - Saturnine Lotions are frequently resorted to, - but I am inclined to think that cold water, will answer equally as well, - it will be very well to dilute it with Vinegar, in order to allay the prejudices of the patient. - you may pour this on the affected part, or keep cloths applied to the part, constantly wet; - and let it be exposed to the atmosphere, so as to suffer evaporation to go on freely. - When ice is used, it should be applied in bladders to the part, as the direct application has been known to produce gangrene, and other mischievous consequences. - I am inclined to think, that these applications are rather injurious when kept on too long; at least by withdrawing them, when the tempriature has been reduced, and reapplying them

soon as the temprature arose, its benificial effects would be more
ceaded. Warmth alone would increase the inflammation, but
when combined with moisteure, it is very benificial, relaxing the tense
surfaces; opening the cutaneous pores, and giving rise to increased cut-
neous transpiration.- Fomentations are used on the same principles
enodyne fomentations, frequently succeede, when others fail, they have
tendency to allay irritation, at the same time that they reduce the
inflammation.- Local abstraction of blood, has been found most
decidedly benificial, if there is general exitement; V.S. should be used
at the same time, a spoonful drawn from the inflammed part, is
equal to two or three drawn from a remote part;- it may be accom
blished by scarrification, cupping and leaching; after leeches fall
it is very advisable to apply cloths, moistened with warm water, so
as to keep up the exudation of blood. -

Treatment of the Chronic variety. —

If we examine our treatment of the acute variety, we will observe that
our object was to diminish vascular excitement; but here we must
ndeavour to change, and strengthen the action, so as to bring the action
of the vesels of the part inflamed, up to its natural standard;- hence
in long continued discharges, we employ astringents, and stimula app
lications in gleet leucorrhea, &c. In Chronic opthalmia we frequently
use sal alcum, sulph zinc, copper, nitrate of Silver. — When you app-
ly stimulations, as alcohol, &c. it is necessary to cover the parts w-
ith oiled silk, to prevent evaporation; if we were not to take

this precaution, evolution would be produced, and our intention would be frustrated.- Blisters, Setons, Issues, Moxa, Tarter emet. ointment, have all been used with decided advantage. Blisters applied near an inflamed part, acts upon the principle of counter irritants, but its principle operation is in increasing the tone of the debilitated vessels;- Rest in most instances is absolutely necessary;- But in some cases, as in chronic affections of joints, frictions and occasional use of the joint, is very useful; and in some instances will remove it altogather.- Some times Indurations remain, after the reduction of inflammation, and are dispelled by pressure, Friction, Electricity, Mercury, &c.

Dissertatio Inauguralis

De Hydrope,

Judicio

Praefecti — Professorum

Regentiumque

Academiae Terrae Mariae

submissa,

Pro gradu Medicinae Doctoris,

Kalendis Martiis

Anno Domini millesimo octingentesimo trigesimo primo,

A Johanne C Reynolds

!!

— "In nulla re propius ad deos homines accedunt
quam salutem hominibus dando".

Dexterrimo, facundissimo,
Chirurgiæ Professori,
Nathan R. Smith M.D.
cujus nomen
virtute et scientia
æquè insigne est,
hocce tentamen inaugurale,
ut parvum testimonium sit
animi grati pro multis beneficiis,
quæ memoria nunquam excident,
dum vescitur aurâ æthereâ,
inscribitur
ab ejus amico et discipulo,
Auctore.

—"Veniam pro laude peto, laudatus abunde
Non fastiditus si tibi, Lector, eo"— Ovid—

Dissertatio Inauguralis
De Hydrope.

Cum meum officium sit quoddam specimen inaugurale exhibere; et cum, variis thematibus hinc inde perlustratis, easdem semper invenerim difficultates; elegi quod in promptu est, minime sperans quicquam novi adducere, sed tantum de iis, quæ jam bene nota sunt, aliquantum dicere. — Thema, in quod sic forte incidi, Hydrops est.

Quando in corporis cavis serum aquosum præter ordinem colligitur, Hydrops adesse dicitur. Hydrops generale nomen est, sub quo plures ejusdem morbi species intelliguntur, quarum diversitas deducitur a diversis corporis partibus, quæ serosa vel aquosa hac collectione occupantur; et inde varia nomina imponuntur.

Est mihi in animo, primò naturam effusionis hydropicæ considerare, et deindè species graviores, hydrothoracem, ascitem et anasarcam, attingere.

In sanitate, constanter in omne corporis cavum aut interstitium serosa vel aquosa humor effunditur, aut halitûs sub forma exspiratur. Humor hæc non diu in cavis variis permanens, posteà vasis propriis indè absorbetur. Hinc patet quod, si in

ullum corporis cavum, effunditur plus humoris quam lympha-
-tica auferre possunt, accumulata erit aquosa hac colluvies;
ac etiam quod, si, exhalatione non prater naturam accidente,
tamen eâdem consuetâ minor absorptio, in hac quoque vice
collectio aquosa occurrerit, et hydropis originem dare poterit.

— De hydrope acuto. —

Nunc dierum bene notum est, hydropem, in conditionibus corpo-
-ris valde disparibus, oriri posse: scilicet, seu arteriarum actio
augeatur, sive corporis totius languor et debilitas adsint.
Varia exempla hydropis ex aucta arteriarum actione orti
me penes est adducere; sed paucorum mentionem facere satis
erit. Inter hydropes acutos, anasarca a frigore inducta, et
ea ab prodigo spiritûs vini usu, et quoque ea post scarlatinam
sequens, locum tenent. In omnibus his, cordis functio pertur-
-batur; et in his, multo sapius quam in hydrope a debilitate
orto, est nobis in potestate curam permanentem efficere. Dia-
-thesis hydropica, qua morbida cordis structura non raro su-
-pervenit, alteram illustrationem prabet.

Hydrops acutus magna ex parte juniores aggreditur; subita est
ejus invasio; et mors, quandocunque ea occurrit, ab symptomatis
apoplexia superventibus plerumque inducitur.

De hydrope atonico.

Epitheto atonico novi scriptores utuntur, eam hydropis speciem denotare, quæ a debilitate inducitur. Huic formæ occasio præbetur, ubi corpus totum (sed maximè vasa lymphatica) vires et actionem amisit, et quoad functiones detritum fuit. Febres protractas et sanguinis abstractiones magnas ac subitas sæpe consequitur. Ab nutrimenti idonei defectu, aut a ventriculo diu agrotante et imperfecto alimentorum concoctione, non raro inducitur. Equidem, nullam speciem aliam, præter hanc debilitate ortam, veteres agnoscebant. Homines ætate provectiores ac detrito corporis habitu plerumque invadit; gradatim incipit; et maxima ex parte nulla causa evidens assignari potest.

De causis

Opera pretium erit, hydropis causas considerare, quæ per attentam hujus morbi observationem detecta fuerunt, vel etiam in dissectis hydropicorum cadaveribus inventa.

Notum est ex physiologicis, omnem lympham, a quâcunque corporis parte reducem, per vasa lymphatica in venas afferri. Si jam quacunque de causa, liber transitus lymphæ in venas impediatur, stagnabit hæc in vasis suis, et absorbentia se evacuare

non poterunt. Hinc absorptio ex corporis cavis cessabit, dum tamen exhalatio per arterias in eadem cava pergat, adeoque hydrops nascetur. Preterea, quando reditui sanguinis per venas impedimentum adest, arteria exhalantes effusioni consueto majori excitantur. Notamus sepe in gravidis mulieribus, si distentus uterus venam cavam ascendentem premat, crura et femora tumore hydropico affici, et partes genitales vera anasarca turgere; et, simul ac post partum hac venarum compressio tollitur, omnis tumor evanescit.

Ex his quoque videtur, cur, obstaculo quovis nato circa auriculam cordis dextram, arteriam pulmonalem, vel in ipso pulmone, sic ut sanguis per hoc viscus non libere transire possit, hydrops metuendus sit. Enim bina vena cava tunc libere se evacuare nequeunt, unde totius sanguinis venosi motus impeditur. Hinc quoque patet, quare tam multi, qui polyposis concretionibus circa cor ac vasa majora laborant, hydropici pereant.

Non minus est, veteres hepar male affectum tanquam omnis hydropis causam accusasse; cum toties hoc viscus in hydropicorum cadaveribus morbidum inveniatur, vena cava ascendens per hepar transeat, ac vena porterum per totam ejus

substantiam distribuatur. Tumore enim quocunque in hepate nato, impedimentum motui sanguinis venosi creabitur, unde hydropica effusio facilè fiet. Remoto autem obstaculo, quod hanc sanguinis moram efficiebat, absorptio liquidi effusi, et ejus evacuatio per varia emunctoria, sequentur.

Licèt impedimentum reditui sanguinis venosi plurima hydropis exempla explicaverit, tamen reliqua sunt multa alia, quæ ei causæ ascribi nequeunt. Scilicèt, nec hydropi cum inflammatione, nec ei chlorosin aut sanguifluxum comitante, potest hæc explanatio applicari. Facta est conjectura, hydropem ex aliqua nervorum conditione pendere. — Sed in quo diathesis hydropica consistit, nos oportet confiteri, non satis bene notum esse. —

Hactenus causas generatim consideravimus, unde Hydrops nascitur. Oportet nunc, eas causas, quæ huic morbo originem præbent, separatim dici.

Morbos acutos, præsertim ubi satis sanguinis non missum fuit, hydrops sæpe sequitur. Diu notum est, hunc morbum, imprimis sub anasarcæ forma, scarlatinam interdum succedere. Eadem sequela, post rubeolam, variolam, erysipelamque, interdum videtur. Evacuationes quæcunque nimiæ, debilitatem inducendo, hydropi ori-

-ginem dare queunt. Sic, a saeva et diuturna diarrhœa aut dy-
-senteria, unde corpus debile et cachecticum redditur, multi
casus incedunt. Contrà idem interdum contingit, ubi evacuatio-
-nes consuetæ, ut hæmorrhoides, catamenia aut urina, suppressa
sunt. — Potus nimius aquæ frigidæ est causa frequens hydropis
subiti; præsertim in castris, dum lassi et æstuantes a validiori
labore vel a longiori itinere milites copiosè frigidam aquam
bibunt, et mox sub dio ad quietem se disponunt. Apud hos, con-
-ditio externa æquè ac interna corporis superficiei hydropi dis-
-ponit. Enim, quando æstuans ac sudore perfusum corpus
frigido aeri repentè objicitur, cutis adeo constringitur, ut
etiam strictura in ipsos oculos incurrat. Simili modo, frigi-
-dus potus internam superficiem contrahit. Sic, ab interna et
quoque externa corporis superficie sanguis repellitur et con-
-gestionem in visceribus necesse est occurrere. A subita hu-
-morum coacervatione, vasa ultra modum oppleta ac dilatata,
quandam atoniam aut relaxationem patiuntur; et in hoc
modo, satis patet Hydropem oriri posse.

Omnes pertinaces viscerum obstructiones ejus causam hujus morbi sæpe
notatum est; adeo ut, si excipiantur hydropes, qui a potu frigido copio-
-sè ingesto oriuntur, ac quoque illi, qui ab evacuationibus sanguinis

nimis fiunt, pauci occurrant casus, in quibus morbida structura unius vel et plurium viscerum non inveniatur. Quomodò hydrops a tali causa oriri queat, satis patet; scilicet, visceribus a morbo auc-tis, eorum moles premendo vicinas venas reditum sanguinis venosi im-pediet, et tunc morbus hic, uti supra monitum fuit, facile se-quetur. Hoc imprimis in hepate metuendum est, cum per illud viscus magna vena portarum distribuatur, et vena cava ascen-dens transeat. Praterea, quando viscera ad crudorum ingestorum elaborationem necessaria quoad functiones impediuntur, corpus totum cachecticum fiet, unde pariter hic morbus oriri potest.

Inter causas hydropis, nimius et diuturnus spiritûs vini usus lo-cum tenet. Hoc habitu viscera abdominis indurari solent, et, uti paulo ante dictum fuit, tales pertinaces obstructiones huic morbo originem sapè probent.

In omnibus avis notatum est, hydropem ab quartana diuturna sapè induci: neque hoc mirum est, quoniam ab hac causa obstr-uctiones viscerum et schirri nulla arte medicabiles sape oriun-tur; unde hydrops facilè sequetur. —— Causis hoc suf-ficiet. ——

—— De signis. ——

Jam nos oportet considerare, quomodò et cum quibus signis

hic morbus incipiat et augeatur. Discrimen inter Hydropem acutum et illum a debilitate inductum supra notatum fuit. Tantùm superest signa ambobus communia describere. — Tument pedes, maxime vesperi: sensim hic tumor augetur, increscitque. Vespere imprimis hic tumor percipitur, quia toto die homine vel erecto vel sedente, humores non facile queunt ascendere. Incipiens talis pedum tumor, horizontali decubitu demum dissipari solet, sic ut mane omnino evanescat, vespere rediturus. Interea malum sensim augetur, tumor altius assurgit, nec tempore noctis dissipatur. — Constans hydropis comes esse sitis observatur. Hoc expectandum est, quum consideremus omnes secretiones in hoc morbo diminui; unde os et fauces arida fiunt, et sic sitis inducitur. — Exhalatio per cutis, quod in sano corporis habitu nunquam deest, hic fere supprimitur; et linea cuticula sicca aspergue invenietur. Liber pulmonis expansio sape impeditur, unde sequitur, dyspnœam frequens Hydropis signum esse. Nam si abdomen aqua plenum turgeat, diaphragma nequit libere descendere, unde thoracis dilatatio et pulmonis expansio necessarie impedientur. Multo magis idem continget, ubi cavum ipsum pectoris aquosa collectione repletur. Præterea in anasarca universali metuendum est, ne pulmones quoque, simul

cum externis corporis partibus, ademate afficiantur; nam talis est hujus visceris conformatio, ut aqua per totam ejus substantiam effundi potest et vesiculis aeriis non communicet. Haec aqua sic effusa vesiculas aerias comprimet et sic respirationi impedimentum creabit. In hoc morbo urina est parca, plerumque rubra sedimentum lateritium deponens. Nec mirum est urinam a sanguine parce secerni, quum serum aquosum in varia corporis cava facile transeat, et renes actioni non stimulentur; et praterea quum, absorptione minuta, minus serosi fluidi, unde urina secernenda est, in sanguine adsit. Pulsus cum hydropis forma variat. In atonica specie, plerumque debilis est; autem in acuta, frequens validusque invenietur. Adhuc reliqua sunt alia signa, quae tamen melius describi possunt, quando diversas species dicturus sum. ——

De curatione —

Postquam dictum fuit de natura, causis et signis hydropis, superest ut de curatione agatur.

In curando hydrope indicatur; primo aquam vasorum condi-tionem restituere; secundo, aquae jam in corporis cava effusae absorptionem efficere; tertio, ubi vires corporis aut huic aut illi non adequatae sunt, auxilio chirurgico uti.

Venaesectio &c. —— Ad primam indicationem efficiendam, diversis

modes utimur, prout diversæ species adsunt. Si hydrops acutus aquam afficiat, arteriarum actionem deprimere et sanguinis impetum in vasa exhalantia minuere, certè nos oportet. Ad hunc finem, sanguinem mittere sæpe necesse ènt. Alio tempore, a cathartici prompte, ab antimonio aut colchico, idem effectus aque obtineri potest. Antèà monitum fuit nimiam arteriarum actionem hydropi originem sæpe dare: in tali casu, vasorum depletio per sanguinis missionem procul dubio utilis foret. In quibusdam hujus morbi formis utilitas venæsectionis ultra controversiam confirmata fuit. Attem in memoria nos oportet habere, remedium tam potens haud temerè utendum esse. In omnibus morbis, nec febre nec inflammatione comitante, magna cautione in sanguinem mittendi opus est. Præsertim in hydrope hoc necesse est, propter debilitatem quam nimii sanguinis abstracti inducere solet.

Stimulantia, deobstruentia &c —— In hydrope e debilitate et corporis languore orto, indicatio est cura, vires aqui sustinere et simul vasa lymphatica stimulare. In hac forma, planè patet, venæsectionem non locum habere. Sed contrà, stimulantibus aetonicis certe nos oportet uti, dum simul aquam jam in corporis cava effusam educere conamur. In tot remedia, quibus ad hunc finem utimur, quædam herba amaræ, aromatica varia, cinchona

chalybeata vinumque utilissima esse inventa sunt. De hydrargyri usu in hoc morbo, observandum est modum administrandi in diversis speciebus valde differre. In forma acuta, amplis in dosibus administrari potest: scilicet salivatio per ejus usum excitata multos tales casus curavit. Autem si hydrops atonicus adsit, nihil magis quam salivatio metuendum est. Nam si consideretur, hunc effectum omnes humores ita solvere ut totum corpus emaciatur, patebit omnibus nihil posse magis noxium esse. Hydrargyrum in parvis portionibus (sed non ita ut salivatio induceretur) multum auxilium certe prebebit. In viscerum obstructionibus utile est remedium: sed exhibendum est in portionibus tam parvis, ut in ventriculum nullo stimulo agat, sed ut conditionem viscerum gradatim mutet. Hic modus administrandi valida remedia, ita ut corpus non turbetur, in curando hydrope aliisque morbis inveteratis, magni momenti esse videtur. E remediis tonicis, nulla ferro cuprove varie preparatis sapius administrantur.

Cathartica, Diuretica &c. — Tres indicationes ad curandum hydropem supra enumerata fuerunt. De prima, qua postulabat aquam vasorum conditionem restitui, hactenus dictum fuit: nunc sequitur secunda indicatio, qua ad efficiendam aquæ effusæ absorptionem spectat. Ad hunc finem illa reme-

-dia, quæ in renes ac intestina agunt, plerumque exhibentur. Facile patet, aquam in cavis stagnantem non posse per alvum aut renes exire, nisi prius absorpta fuerit. Hinc ea purgantia valida, quæ Hydragoga vocari solent, plerumque eliguntur, quæ remedia non tantum evacuant, sed quoque fortiter movent, et vasa lymphatica ad agendum excitant. Inter talia cathartica, Jalapa, supertartras potassæ, gamboga, elaterumque utilissima habentur. Dignum est notatione validam alvi ductionem, in fere omni Hydropis casu, aliquam opem afferre; nam vasa lymphatica stimulare videtur, et simul serosi fluidi eductionem efficit. Sæpe notatum fuit, ubi aquarum expulsio cathartices remediis tentatur, curationem non bene succedere, si alvi ductio post longa intervalla repetantur. Quare medici in eorum usu cessare nolunt, donec aquarum moles omnino evacuata fuerit.

Cum aquosa humor, quæ in sanguine semper adest, per renes lege naturali secernatur, facile apparet ratio, quare medici remedia diuretica semper administraverint. Præterea hæc remedia hoc commodi habent, quod corpus turbent minus, quam cathartica aut emetica, minusque ægros debilitent. E diureticis in hoc morbo exhibitis, quædam debilitantia sunt; inter quæ, nitratem ac acetatem

taxa, digitalem colchicumque, licet numerare. Alia stimulare
unt, in quorum numero, scilla, spiritus aetheris nitrosi, oleum tere-
inthina atque juniperi bacca habentur. Illa in thoracis hydrope,
haec in ascite utiliora esse inventa sunt. Ab horum remediorum
conjunctione, multum commodi sape obtineatur. Ubicunque
sanguinis missio indicatur, digitalis et cathartica propriè ad-
-ministrari queunt. Usus hydrargyri cum digitali aut scilla
conjuncti multum prodesse sape inventum est.

Auxilium Chirurgicum. —— Supra monitum fuit, ubi veies cor-
-poris restituendo aequam vasorum conditionem aut efficiendo
aquae effusae absorptionem non adequatae sunt, auxilio chirur-
-gico uti. Modi chirurgici ad levandum hydropem sunt Para-
-centesis ac scarificationes, de quorum utilitate, melior dicendi
occasio praebebitur, quando diversae species considerantur.
Hydropis natura ac pathologia jam consideratis, et generali rati-
-one medendi breviter delineata, reliquum est ut dicatur de divi-
-sis ejus speciebus; quorum tres graviores, hydrothoracem, ascitem et
anasarcam attingere satis erit. Primo igitur, de thoracis hydrope
et deinde de aliis agetur. ——

— De thoracis hydrope. —

Supra dictum fuit, exhalationem et absorptionem fluidi in omnibus cavis corporis obtinere; et quoque idem in cavo pectoris verum est. Signa diagnostica, quæ thoracis hydropem adesse docent, cum magna cura notari debent. Autem diagnosis evidens hujus morbi non semper facile obtinere potest: nam interdum aquam in thoracis cavo adesse putamus, ubi illud cavum omni morbo expers est; et aliis temporibus, idem cavum fluido plenum inventum est, ubi per vitam nulla hujus morbi suspicio exstabat. Signa fere enumerata, quibus serosa collectio in hoc cavo denotatur, sunt sequentia; dyspnœa, decubitu horizontali corporisque motu, aucta; facies pallor vel livor; urina parca, rubra, sedimentum lateritium deponens; pulsus inæqualis, intermittens; pedum vel manuum œdema; subita e somno excitatio, cum palpitatione. In tribus cavis thoracis, pericardio nempe, cavo dextro sinistroque, potest aqua colligi. Quoddam discrimen insignis esse dicitur, prout ha diversa sedes occupantur. Si alterutrum pectoris cavum aqua plenum est, ager in latus sanum decumbere nequit: autem si in utroque cavo fluidum accumuletur, in tergum simul humeris elevatis plerumque decumbit.

Hydrops pericardii — Signa diagnostica Hydropis pericardii designare sæpe conatum est: autem nos oportet confiteri certum indicium non facile obtineri posse. Oppressionis et angustiæ sensus circa partem anteriorem thoracis signum hujus morbi esse videtur. Quidam auctores mentionem faciunt signi, quod si semper adsit hunc morbum certe designaret. Illud est motus undulatorius, qui inter secundam ac tertiam costam percipitur. Tussis sicca irritans sæpe adest; et cordis actio plerumque turbatur. Unde palpitationes, pulsûs inæqualitas et aliquando syncope sequuntur, sensu suffocationis quasi instantis præcedente.

De curatione —

Quod in Hydropis curatione indicatur, supra dictum fuit: Magni momenti esse declaratum fuit, quòd aqua in cavitates effusa educeretur. Hoc quidem duplici modo tentatur; aut per alvum ac renes, aut si illud frustra tentatum fuerit, per faciendam puncturam in cavum quod aquosa collectione occupatur. Hæc operatio paracentesis vocari solet. De priori curationis ratione, nempe per cathartica ac diuretica, anteà dictum fuit, et nihil ulterius addendum est, nisi quod, in hac specie magis quam in aliis, efficacia diureticorum plane appa-

-reat ; et etiam quòd digitalis pra omnibus ceteris plerumque bene succedat. Optimam formam ejus exhibendi medici experti fuerunt infusionem esse. Cum aromaticis atque spiritu aetheris nitrosi potest digitalis utiliter conjungi.

Paracentesis thoracis sape proposita sed raro executa fuit, praser-tim quia hujus morbi signa magna ex parte incerti sunt. Nullam causa est credendi, minus auxilii hac operatione prebendum esse, quam simili operatione in cavo abdominis, aut plus periculi metuendum esse. Paracentesis non tollit morbi causam; sed a presenti suffocationis periculo aegrum liberat, sicque tempus et occasio medico datur, ut causam efficacibus remediis aggrediatur.

— De Ascite. —

Postquam de thoracis hydrope dictum fuit, sequitur ut de ascite vel aquosa collectione in peritonaei cavo agatur. Ubi in hoc cavo aqua collegitur nullum indicium sui dabit, donec abdomen fluido aucto distendi incipiat. Verum quidem est medicum prudentem, a morbis praegressis, colore corporis mutato, urina parca et aliis signis sape sentire hydropem futurum esse. Ascites potest facile cognosci, quandocunque signa, quae diathesin hydropicam denotant, simul cum tumore ac fluctu-

-ationes adsunt. Licèt symptomata hujus morbi valdè manifesta videantur, tamen diagnosis interdum difficilis est. Ovarium hydropicum aut alter morbidum ascitem sæpe simulavit; atque medici aliquando erraverunt, quando ascitem a tumore gravidi uteri distinguere conati sunt. Quibusdam in casibus hydrops abdominis solùm adest; autem cum anasarca aut hydrothorace sæpius conjungitur. Non semper aquosus humor in peritonæi cavo liberè fluctuat, sed in cavis membranaceis sæpe continetur, et tunc hydrops saccatus vocari solet. Utile semper erit medico, si scire possit an tumor ab aqua in cavo abdominis fluctuante fiat, an ab hydrope saccato. Nam si saccati generis sit, paracentesis nihil auxilii præbere potest; autem contra, si serosa humor in peritonæi cavo continetur, hæc operatio plurimum valebit. Dignoscere inter has duas formas ascitis difficile esse sæpe invenietur. Autem si, incipiente morbo, tumor rotundus in abdomine perceptus fuerit, qui sensim increvit absque multa molestia atque si crura tarde turgere inceperint, et venter, situ ægri mutato, figuram nunquam mutaverit, uti fieri solet quando aqua in peritonæi cavo collegitur, tunc expectandum est hydropem saccatum adesse.

Causæ hydropis generaliter supra consideratæ fuerunt; et de iis quæ magis precipue huic speciei originem præbent præter supra dictum, perpaucis verbis opus erit. Ascitem esse sequelam inflammationis peritonæi, et chronicæ et acutæ, multis scriptoribus observatum fuit. Omnes obstructiones ac scirri viscerum et maxime morbida hepatis conditio inter causas supra enumeratæ fuerunt, et quandocunque in hoc modo hydrops inducitur, formam ascitis plerumque assumit.

De curatione ——— Modum curandi aliquantùm variare, cum causa quæ ascitem inducit, manifeste nos oportet. Ubi ex organico viscerum morbo pendit, nulla arte ferè medicabilis est: et ubi conjungitur cum anasarca late patente, totum corpus ita male affectum esse indicat, ut permanens cura pene desperanda sit. Apud eam speciem, quæ inflammatione peritonæi exoritur ac naturæ localis aliquantum habet, nostra remedia plurimum valent. Sanguinem mittendo, hirudinum, vesicatorii, et fomentationum applicatione, unà cum alvi ductione ac hydrargyri usu complures tales casus peritus curati fuerunt. Cathartica hydragoga, imprimis jalapa, potassa supertartras, elateri-

-unque valde proderunt. Quoque necesse erit iis remediis ute qua deobstruentem cum diuretica virtute conjungunt. Ab scilla cum hydrargyro conjuncta tale remedium prebetur. Ubi aquosa collavies adeo increvit, ut respiratio impediatur aut molestia distentione abdominis inducatur, paracentesin perfici oportet. Plerumque creditur, curam permanentem paracentesi semel perfecta, nunquam fieri posse: Sed hac opinio procul vero sape inventa est. Quadam igitur est ratio, quare viri in arte medica celebres illam damnaverint, imo mortem accelerare dixerint. Facile respondetur. Paracentesin tentaverunt, postquam omnibus aliis remediis incassum usi fuerant, cum vires agrorum collapsa ~~fuerant~~, et totum corpus quoad functiones deturbatum fuit. Hinc facile patet, cur successus hanc operationem non sequebatur. Ubi abdomen nondum in magnam molem excrevit, et morbus adhuc recens est, efficaciora remedia, nempe purgantia ac diuretica merito tentari possunt; hac spe, ut per vias naturales aqua evacuaretur. Sed non satis inculcari potest, ne nimis temporis in tali curationis modo consumatur, ubi tumor illis non minuitur, sed vel manet idem vel increscat. Insigne levamen

aqua obtinetur, et licèt aqua emissio non sanet, tamen medicina locum facit. Hanc operationem nimis subito perficere, censuram certè meretur; sed plus periculi, a nimia distentione quam a paracentesi, metuendum esse.

De anasarca.

Hydrothorace et ascite jam consideratis, tantùm superest ut de anasarca agatur. Ἀνὰ σαρκα ὕδως dicebatur Græcis hæc hydropis species, unde epithetum Latinum anasarca ortum est. Ejus sedes est in textu cellulosa, qui per totum corpus late patet. Serum aquosum igitur, in hoc textu collectum per totum habitum facile dispergetur: possunt etiam singulares partes eodem vitio tumere. Pedes, crura, et femora anasarca sæpe sola laborant; imo plerumque ab inferioribus partibus hic morbus incipit. Nam aqua in membrana cellulosa collecta, propio pondere versus inferiora delabitur et vesperi tumere pedes facit, qui tumor horizontali situ in lecto denuo dissipatur. Tamen hic tumor iterum rediturus est, quando erecto corpore artus inferiores in situ declivi ponuntur, præsertim si difficilis sanguinis venosi ascensus motu musculari non juvetur. Si partes hydropica digitis premantur, fovea fit, quæ tensum denuo assurgit. Cellulo membranacea cum se invicem communi-

cant; quare, ubi quæquam presse evacuantur, liquidum in illis contentum in vicinas transit, et presse cessante, sensim in priorem locum redit. Peculiaris faciei pallor cum pulsu debili ac inequali plerumque adest. In debilitatis ac detritis corporis habitibus, anasarca cum petechiis comitantibus non raro invenitur. Sitis ferè insatiabilis plerumque urget, et irritatio ex hac causa febriculam diutarnam excitare solet.

De anasarca causis.

Causis hydropis supras consideratis, hic necesse erit tantum pauca verba de iis dicere, quæ magis precipue huic speciei originem præbent. Anasarca generalis ortum ducit a variis causis quæ totius corporis et imprimis venarum conditionem infirmam inducunt. Hinc fit, anasarcam, hamorrhagiis profusis, longis hæmorrhoidum ac catameniorum fluxibus, necnon diarrhœis, diabete atque phthisi pulmonali, sæpe supervenire. In his casibus, signa hydropica tarde incipiunt: autem sunt casus anasarcæ, in quibus symptomata subito videntur, et tunc forma acuta est. Hic postquam frigore cum humore quisquam exposetus fuit, tumores hydropici sæpe subitò sequuntur. Hic pulsus plerumque validus ple-

-nusque invenietur. Indicia quoque, quæ morbidam thoracis viscerum conditionem detotant, eodem tempore aderunt. Porrò anasarca genuina proles est spiritûs vini; nam quid est frequentius quam quòd Bacchi filii tandem hydropepanas fiant. Anasarca ex hac causa plerunque tarde aggredietur, et postquam totum corpus longo vini usu infirmatum fuit. Autem ejus invasio interdum subita est, et tunc forma acuta est, atque eadem signa eam comitantur, quæ jam nunc dicebatur adesse, quando e frigore orta est. Exanthemata, nempe scarlatinam, rubeolam, erysipelamque, hic morbus sæpe sequitur. In tali casu suspicatum est, diathesin hydropicam pendere ex morbida cutis conditione, quæ eruptione relinquebatur. Anasarca localis vel œdema a venarum compressione ortum frequenter duxit. Sic gravidus uterus et glandulæ inguinis tumefactæ apud causas meritò habentur. Idem effectus, etiam si sano ~~corpore~~ habitu, aliquando sequetur, ubi corpus in erecto situ nimis diu permansit.

— De modo curandi. —

In anasarca sæpius quam in aliis speciebus, potest auxilium a sanguinis missione obtineri. Ubi a frigore aut nimia spiritûs

vini usu ortum ducit, sanguinem mittere, non tantum utile sed etiam necesse sæpe invenietur. Eodem tempore, cathartica ac diuretica, imprimis digitalem atque potassæ nitratem nos oportebit uti. Tamen in memoria habendum est, hæc aut alia diuretica non multum adjumenta allaturas esse, nisi potus diluentes simul administrentur. Nam procul vero est, tumores hydropicos, uti veteres medici putabant, minuendos esse, si agri a potu abstinerent. Patet omnibus, modum curandi jam nunc proposetam tantùm in una asarca forma posse succedere: enim ea symptoma sæpe adsunt, quæ sustinendi vires corporis necessitatem indicant. Ad hunc finem, tonica, imprimis cinchona, camphora, ammonia carbonas, atque aromatica sæpissime exhibentur.

— De scarificationibus. —

Si aqua effusa quacumque via de corpore possit educi, semper utile erit, quum agri inde leventur atque locus medicina detur, ut morbi causa tolli posteà possit. Ubi in majoribus cavis corporis, abdomine vel thorace aqua colligitur, paracentesi educitur, uti supra dictum fuit. Autem ubi per membranam cellulosam serum aquosum distribuitur, planè patet, quendam alium modum quæren-

-dum esse. Hic natura ipsa viam indicavit; quippe interdum contingit, cuticulam a distentione dirumpi et aquam per po-
-ros cutis exire; et quandocunque hoc occurrit, multum com-
-modi sequi notatum est. Naturam sequimur et scarifica-
-tionibus fluidum effusum educimus. Quando scarificatio-
-nes fiunt, debet cutis ita pertundi, ut vulnus usque in membranam cellulosam transeat.

Nos oportet confiteri, aliquid periculi in languido corporis habitu metuendum esse. Auxilium tamen, quod illa of-
-ferunt, sepe insigne est, et compensat periculum quod illas comitatur.

An

Inaugural Dissertation

On Amenorrhoea

Submitted to the consideration

of the

Provost and Trustees

of the

University of Maryland

for the

Degree of Doctor in Physick

By

William D Whiteford

of Maryland

To

Doctor James Montgomery

This Dissertation

On Amenorrhoea

Is respectfully inscribed

As a small testimony

Of respect and esteem

By his sincere friend

and former pupil

The Author

To

The Professors

of

This University

This small tribute

of

thankfulness for their kindness

and

gratitude for their instructions

is

respectfully dedicated

by

The Author

In accordance with the regulations of this University which enjoin it on those who are candidates for Collegial honours, to write and defend a Thesis and conscious that I have nothing to advance from personal experience confirmed by observation I have notwithstanding selected and offer for your approval this treatise

On Amenorrhoea

When the body has attained its growth the quantity of blood and sensorial power which has hitherto

been employed to the developement of the animal frame, constituting an excess induces a local congestion, This nervous and sanguineous accumulation takes place in the Ovaria and from them is extended to the Uterus and mammæ, exciting in the Uterus a new action and secretion and imparting to the mammæ a peculiar sensation, arising from their Sympathy with the Uterus. These processes are effected for the purpose of propagating the human race - This secretion

which is Sui Generis of a blood like
appearance and possessed of peculiar
properties, and which is thrown off
periodically is indifferently called
Catamenia or menses indicative of
its taken place monthly
In warm Climates menstruation
takes place at a much earlier period
and is greater in quantity than in
cold ones though the time varies
much according to the peculiarity
of constitution, In warm Climates
the discharge may be said to

commence about ten years of age, in
temperate Climes from fourteen to
sixteen and in cold Countries from
eighteen to twenty, Its duration
generally continues from three to
six days, and the discharge varies
from three to six or eight ounces
If the menses do not make their
appearance about the time of life
they commonly appear it is called
a Retention and when accompanied
with symptoms of general disordered
health with a pallid greenish

yellow complexion it is called Chlorosis.
Any interruption of the menstrual flux
after it has been completely established
except in cases of pregnancy is to be
considered a disease, and this discharge
may be interrupted at any period of
life before their final cessation caused
by great general debility or where any
chronic affections exist impairing the
powers of life it is then symptomatic
of those other affections and of itself
does not become the object of medical
treatment, When it is an Idiopathic

affection it is most commonly induced by cold suddenly applied depressing passions such as fear and sorrow which are supposed to produce a constriction of the extreme vessels of the Uterus too free evacuations &c Symptoms are pains in the Lumbar region, languor, chills with slow fever urine red and turbid, and sometimes pale, dyspepsia, dyspnea, disturbed sleep face pale, feet cold, and œdematous head-ach emaciation, palpitation of the heart, depraved appetite with a

great desire for unnatural food &c
Suppression of the menses seldom
continues long before it is accompanied
by various symptoms in different
parts of the body, partly arising from
an irregular determination of blood into
other organs producing a congestive or
Plethoric state of these organs from
the customary discharge being
suppressed partly from the great
sympathy of the nervous system in general
and of several organs in particular with
the Uterus, from the latter of these

causes various nervous and hysterical affections occur, and from the former hemorrhagies from various parts

From many of the symptoms we should conclude that debility is the primary cause or a want of tone in the secreting vessels of the Uterus, depending I should think on general debility. For it may be observed that the symptoms in plethora may degenerate into that depending on weakness, young persons of luxurious habits whose exercise is not proportioned to the quantity of

food taken, are liable to the former particularly when cold may be applied, here unless active remedies be employed the obstruction from Plethora will be converted into obstruction from weakness, because the action of the heart and arteries involving the capillary system, is so violent that the powers of life must soon be exhausted. Debility being the result of over excitement it might be supposed that the strenght of action would be brought down to the point of

health, but it sinks below it

Diagnosis, This disease is sometimes with difficulty distinguished from pregnancy at its commencement, but it is to be sought for by the symptoms not abating after the fourth month and no motion being percieved in the Uterus

Prognosis, Varies according to the causes, Symptoms, time of suppression and age of the patient, where the discharge has been suddenly suppressed it may in general be easily restored by employing

the proper means, but where the
suppression has been of long standing and
connected with Fluor Albus the
prognostic is not so favourable

Treatment

whereas the art of curing diseases
consists very much in investigating
into the causes which produced them
I shall not confine myself to any
particular remedy and scarcely
think it necessary to mention all
the various remedies recommended
by different Authors in this disease

as they ought not to be used
without distinction and mature
deliberation, the judgement of which
must depend upon the Physician
as I believe when art brings the
system to a proper balance, that
nature will in general restore her
proper secretions – Though cold is
the most common cause of this
disease it may be proper here to
mention the treatment of such cases
where the patient is of a full habit
with a full and tense pulse, the lancet,

antiphlogistic regimen, and warm bathing
is to be had recourse to, but if the patient
be of a weak habit of body, generous diet
such as is easily digested moderate
exercise and wearing flannel next to
the skin, together with the Cathartic
and Tonic plan is the proper course
to pursue

Impressed with the responsibility attached
to the Medical profession I can cheerfully
though diffidently undertake its various
and arduous duties, governed by those
principles which have been

taught by the different
Professors of the University
of Maryland

William D Whiteford

An

Inaugural Dissertation

on

Inflammation

by

E Howy Deas.

Charleston S Car

An

Inaugural Dissertation

on

Inflammation

Submitted

to the consideration

of the -

Rt Revd James Kemp D.D. Provost -

the Regents

& faculty

of the

University of Maryland

by -

Thos Y Deas -

Charleston

South Carolina

On Inflammation — By C. Henry Deas

Among the various subjects that claim the attention of men of science, there is no one which merits it in a more particular degree — & none which is veiled in more obscurity, & which requires to be better understood than the one now under consideration; in as much as it forms the nature of so many diseases, & is a consequence on every operation of the Surgeon — — —

It is not therefore with the vain hope of rescuing the subject from the oblivion in which it lies entombed, that it is undertaken, or of forming any definite theory on one so diversified in its nature, but rather to conform to that established custom of the School which enjoins it as obligatory on each applicant to present an inaugural dissertation on some Medical subject antecedent to the reception of his Degree —

Inflammation then which is derived from the Latin term Inflammo (to burn) is generally characterized by the following symptoms, redness, increased temperature, pain, & swelling of any particular part. These symptoms are always sufficiently pathognomic of the disease when situated externally & we judge of the affection of an internal part "by a fixed pain & lesion of some function" — — —

With regard to the proximate cause of inflammation great contrariety of opinions have existed & various theories been advanced. It was first supposed to be owing to the too great viscidity of the blood, & the buffy coat, that appeared sometimes on the blood drawn in inflammation seemed they thought to confirm them in their opinion; but this appearance we now know is not peculiar to inflammation, for it sometimes appears when there is no inflammatory symptom whatsoever, & frequently does

not appear, when there is every symptom characteristic of inflammation, & that this buff, if we are to believe Mr Hewson, & we have every reason to do so, is the effect of the slow coagulation of the blood, by which means the red globules subside in consequence of their superior specific gravity; leaving the ~~[illegible]~~ fibrine colourless — & that under these circumstances the blood is less, instead of being more viscid, as the authors of this theory, would lead us to suppose — — —

The next is that of Dr Boerhaave — who imputed it to what he chose to term an "error loci," that is the red globules being impelled into vessels not ~~[illegible]~~ intended to transmit them, but this, says an eminent author is rather, an effect & not a cause of the disease —

After these theories came that of Dr Cullen who believed it to be a Spasm of the extreme vessels ~~[illegible]~~ suspending an increased action in course of them,

at least," says he "in all cases not arising from direct stimuli applied; & even in this case the stimuli may be supposed to produced a spasm of the extreme vessels" This theory together with that of Mr Hunter who supposes it owing to an "increased action of the vessels" & a salutary operation of some wise & provident power & not as a disease, for says he "inflammation is to be considered only as a disturbed state of the parts, which requires a new but salutary mode of action wherein a natural mode of action is alone necessary — From such a view of the subject therefore, inflammation is not to be considered but as a salutary operation consequent either on some violence or on some disease". These theories I say for a long time received the credence of the medical world, until a new one was advanced by Dr Lubbock & Mr Allen of Edinburgh who imputed it to a debility of the capillary

lesses admitting of conservable distinction - & pub-
lished by Dr Philip Wilson in his treatise on
Febrile Diseases — — — — — — —

To attempt fully to advance a refutation to all these
theories would far exceed the limits here proposed;
with respect to Dr Cullens theory it will be sufficie-
ent to remark, that it differs but little from that
of Dr Boerhaave, in fact, only in the cause assign-
ed for the obstruction - obstruction being admitted
in almost every theory on the subject to possess some
agency in the proximate cause, & as the latter
theory is allowed to be erroneous, the former must
likewise perish as the medical world advan-
ces in science & knowledge — The most obvious er-
rors to which the theory of increased action is liable,
is that it first supposes it to be a salutary
action to clear the system of some impending evil;
this is so far from being the case that we often

find it a most fatal & dangerous disease: another objection is that it supposes - the increased action consequently increased friction to be the cause of the heat of the part - but this is now generally allowed to be incorrect: & that it is owing to the change of the blood from the arterial to the venous state whereby its capacity for caloric is lessened —

Having now illustrated as completely as time & present circumstances will admit of, some of the principal theories on the subject of inflammation, the only one which it now remains for us to explain is that of Dr. Lubbock & Mr. Allen & which is the theory we shall here adopt as it seems least subject to errors & explains in a more satisfactory manner the characteristic symptoms of inflammation; & for an elucidation of the theory we will consult the treatise of Dr. Philip Wilson on febrile diseases - where it is clearly & fully proved - for says he

"if I take the same view of it will the above gentlemen (alluding to Dr Lubbock & Mr Allen) it is not necessary that the vessels should be in a state of debility; their action may be more powerful than in health it is only necessary that the proportion which their action bears to the vis a tergo should be greater than in health - The vis a tergo remaining the same the vessels before inflammation can take place according to this theory must be debilitated but if the vis a tergo be increased as in Synocha inflammation may take place although the vessels act as powerfully as in health or more so - But after inflammation has taken place they are supposed to be preternaturally distended, we must suppose them debilitated" - - -

Such is the theory advanced by Dr Lubbock & Mr Allen & for the purpose of proving which Dr Wilson instituted a series of microscopical observations &

which on account of their prolixity it would be impracticable here to enumerate, but which clearly prove that debility is the first change that takes place. & from this theory likewise we can more readily account why inflammation occurs chiefly in the young, robust, & those of the Phlogistic Diathesis — — — — — —

One of the principle characteristic symptoms we have already observed is redness — & this most indubitably must be the effect of the presence of a greater quantity of blood in the part than usual, & this augmentation we conceive to be owing to the preceded debility of the capillaries followed by an increased action in the larger vessels, & consequently admitting of a greater flow of blood to the part, & as the capillary arteries cannot on account of their debility convert the blood into venous as readily as in health there must of course be an accumulation — —

The swelling & pain which in common received the=
ries have always eluded research is by this doc=
trine readily accounted for: the former was supposed
by Mr Hunter to be owing to the extravasation of
coagulable lymph, which ~~xxxx~~ while in passing
through the inflamed parts must undergo some
change which causes it to ~~xxxxxx~~ coagulate
sooner than it ~~xxxxx~~ otherwise would do, but
what cause it is that produces the effect he
does not explain. "If on examining an inflamed
part through the microscope by transmitted light
it is at once evident" says Dr Wilson "that its increas=
=ed size is at least in a great part occasioned by
~~the~~ vessels turgid with red blood" — — — —
The "pain also of an inflamed part" continues
the Dr to observe "is doubtless the consequence of the
preternatural distention of the capillaries, &
which is often pulsatory, corresponding to the pul

=sation of the larger arteries, which, being in a
state of increased excitement, tend at every con=
traction of the heart to dilate the capillaries, the sensi=
bility of which is increased by the unusual accumu=
lation of arterious blood; "for the whole blood of an
inflamed part" he says "is in what is called ac=
tive inflammation, arterious" "& the pain remits as
the blood becomes venous, which only happens
in proportion as a tendency to gangrene supervenes"
The increased temperature of an inflamed part
which is the last of the characteristic symptoms
which remains to be explained; & this effect as
has already been observed is induced by the con
=version of the blood from the arterial to the Venous
state whereby its capacity for caloric is lessen=
=ed; La says an author on the subject "as the
animal temperature seems to be chiefly supplie=
=d by the change of the blood from the arterial

to the venous state whereby its capacity for ca-
loric is lessened, & as this change is constantly
going on, wherever there is an accumulation of
arterial blood there must also be an increased
temperature — — — — —

All the exciting causes of inflamation
though numerous are referable to the two follow-
ing divisions; 1st. Those which act locally: that is,
directly to the part to which they are applied &
which admits of being subdivided into those
which act chemically & those which mechani-
cally — 2nd. Those which act ~~directly~~ generally
on the system producing fever (for fever & inflam-
mation seem to be nearly synonymous — the
former being a general the latter a local
affection) — From the view which we have
taken of the proximate cause of inflamma
tion; the Modus operandi of the exciting causes

are so evident that they require no particular ex-
lination here - they almost unquestionably must
act either by producing some debility in the capil-
laries, or by increasing the force of the vis a tergo -

The most usual consequences or terminations
of inflammation ~~xx xxx~~ is in general said to be
either in Resolution, Suppuration, & Gangrene
or Mortification. By Resolution is understood
that termination of an inflamed part by which
the disease disappears without the induction of
any other, or the destruction of any of the parts
which it occupies, & that this effect is produ-
ced "as soon as the capillaries are in due propor-
tion to the vis a tergo" - - - - -

When neither the ~~xxxx~~ powers of nature
or the attempts of art have been effectual in
procuring a resolution of the inflamed part
a peculiar fluid is produced which is assig-

nated pus; & the inflammation is said to terminate in Suppuration. The nature of the substance to which the appellation of pus has been prefixed was for a long time very imperfectly understood. It was believed by the Grecian Physicians that the blood (or its humours) underwent a species of putrefaction or concoction to become converted into the substance called pus; & that by the powers of life or nature this conversion was effected. Sir John Pringle & others believed that an effusion of serum was produced in inflammation, & that by means of heat this serum was converted into pus; & by others again it was supposed that pus was produced by a dissolution of the inflamed part; but all these theories have been proven to be erroneous; & the want of substance which sometimes appears in

now known arises from absorption. The Theory which now prevails, & which is we believe the most modern doctrine on the subject is that which supposes that "pus is separated from the blood by the insensible operation of the secerning arteries, just as ordinary secretion takes place: & that the peculiar mode of action in the arteries is the reason why pus should be separated from the circulation rather than coagulable lymph mucus &c &c ——————

By Mortification or Gangrene is implied the extinction of life in a part before endowed with vitality: & it is in general known by the part becoming cold, insensible, discoloured & flaccid together with the abominable fetor ~~which~~ which is exhaled. The pulse at the same time is frequent & feeble & the patient becomes unusually weak which increases rapidly, he complains of great thirst, the tongue is foul, & the teeth are cover

ca with a sordid matter, the eyes become languid, & the features are sharp & anxious; & when the nine & faces are past involuntarily we may fear approaching death — — —

The prognosis in inflammation is mostly favourable, but before we can form a correct one it is necessary that the age & constitution of the patient be known, his mode of living & changes of habit & situation, also the violence of the symptoms that are present & ~~whether~~ the texture of the part affected & whether essential to life or likely to be ultimately brought to suffer although not primarily injured — — — — — —

In attempting the cure of inflammation Resolution is the only termination of which it is intended to treat, for it is the only one in which the cure can, strictly speaking, be considered as perfect, for in as much as the others are always

attended with a loss of substance which requires a different mode of treatment - before the parts can be restored to their healthy functions: & as External Inflammation is generally a slight disease yielding readily to topical bleeding & the class of remedies termed discutients - & when violent is always attended with fever - The remedies here proposed to be made will refer to it when attended with general fever

Bleeding then has ever been considered the most efficacious remedy in all active inflammations & in most cases it is indispensably necessary being the only one by which a cure can be effected Concerning the quantity of blood necessary to be detracted in all inflammations it is evident no general rule can a priori be given which can determine the quantity requisite; but it must be used in proportion to the strength of the patient, & the vitality of the part affected. Neither can the state of the

pulse always regulates us, for in sound inflamma-
tions especially in those of the Viscera of the abdomen
& Thorax, the pulse is smaller & less frequent than
in Inflammations generally - & under these cir-
cumstances the nature of the symptoms present
& the appearance of the blood drawn, together
with the increased strength & frequency of the pulse
after or during the flow of blood will always
regulate us - It is a common opinion & sup-
ported very strenuously by Dr Wilson that blood
should be taken as near the inflamed part
as conveniently can, & when a sufficient quan-
tity can be so taken. it ought always to be preferred
because it not only possesses all the advantages
of general bloodletting, viz- diminishing the vis
a tergo, but at the same time relieves the congestion
of the part, which we have already observed to be
foremost in all inflammations - Numerous other

other remedies besides bloodletting have been prescribed for the cure of inflammation such as Cathartics, Emetics, Diaphoretics &c but their use depends in a great measure upon the kind of inflammation present as for instance Cathartics are essentially necessary in Phrenitis. Enteritis &c but in Gastritis & some others quite inadmissable. With respect to the use of Blisters, altho' the nature of their modus operandi has given rise to numerous disquisitions still the greatest advantage is experienced from them, & they ought always to be used after we have completed our bleeding. They operate probably by proving an excitant to the debilitated capillaries thereby giving nature an opportunity of relieving herself of the congestion —

An

Inaugural Dissertation

on

Spina Ventosa or White Swelling.

Submitted to the Consideration

of the

Faculty of the University of Maryland

For the degree of Doctor of Medecine by,

A. Marlee Hazlehurst.

of

Pennsylvania.

To
Elisha DE Bulls M.D.
Professor of Chemistry in the University of Maryland.

Sir

permit me to dedicate to you the following pages as a feeble testimonial of my Gratitude for your attention to me, since a Student in this University. That you may long continue an ornament to your profession and a blessing to society is the sincere wish of your Most obliged
Humble Ser.t
Charles Wagelhurst.

On Spina Ventosa or White Swelling.

To any person possessing an Anatomical knowledge of the Structure of the joints in the Human body and more particularly with the formation of the Knee Elbow and Ankle joints, the frequent failure of remedies applied to them when in a morbid State by the Surgeon would not appear singular or of difficult explanation.

Before entering into an investigation of the causes and mode of treatment of White Swelling, I think it most proper to treat of Formation of the joints. All bones are covered by a strong fine Membrane denominated Periosteum. It covers the whole surface of them except the articulating surfaces which are invested by Cartilages and Capsular Ligament. There is a thin delicate Membrane lining the inner surface of all the joints but from which a clear transparent fluid is effused to lubricate the moving parts. This is called the Synovial Membrane and the fluid secreted the Synovial Fluids. The Membrane in a sound State is possessed of little Sensibility, but when inflamed becomes exquisitely painful and according to some Authorities during the inflammation the Synovia secreted partakes the appearance of Pus.

The joints are maintained in their appropriate situations by the Ligaments. They seem to be of the same texture and Sensibility as the Periosteum and possessed of as little Sensibility when in a healthy

state; but when inflamed are extremely painful.

Joints when inflamed present all the common appearances of phlegmonous inflammation in their termination in the same. Almost all diseases of the joints can with few exceptions be traced to some accidental injury or exposure. The most frequent causes are sprains, wounds &c suppressed perspiration, cold, damp produce Rheumatism. Taking the knee joint as an example, the first symptom by which the person is apprised of the disease is pain on motion; speedily followed by all the concomitants of acute inflammation. Every part connected in the mechanism of the joint is affected. The heat of the part is considerably augmented. In rheumatism the sheaths of the tendons seem to be the parts most generally affected: owing to the low state of vitality in the ligaments & cartilages &c it seems most disposed to run into the chronic form. Antiphlogistic when depleting remedies are not resorted to in the first stage. Under the circumstances last mentioned suppuration would be very likely to ensue. Hectic fever would supervene. And it would become immediately necessary to commence the second stage of inflammation. In the slight inflammation stage the knee is full and hard. In the aforesaid of disease it becomes small and frequent. The skin is dry and hot. The patient is delirious. Right hand accom-

=cans that stage and the constitution finally sinks under the accumulated pain and irritation. There is sometimes effusion into the cavity of the joint constituting dropsy of the joint. This frequently recurs at the termination of fever and according to the proper the joints are so liable to dropsical affections as the knee joint. The existence of a sinus can be ascertained by pressure on each side which diminishes the pain.

The treatment to be pursued in simple inflammation of the joints, both the constitutional & topical remedies are to be employed. That the inflammation of the joints of the lower extremities is sometimes general and local bleeding by cupping and leeching may be used but general blood-letting is rarely necessary. Local bleeding may be used advantageously when the pain can be diminished with it. Warm applications have by some been highly extolled but in the employment of them strict regard should be paid to the feelings of the patient, and the effect ascertained.

There is nothing like remedy that could more promptly relieve the internal inflammation than cold. Yet there are thirty seconds of constitutional value when application would daily produce a beneficial effect. Warm & ventilation in those of a low and complicated will often prove of very great advantage. In those cases of fever

plethoric habit cold will often in a few hours produce great relief. A constant compression from the inflamed surface might be kept up by means of cloths wrung out in cold water with a solution of camphor of sal-ammoniac or any corroding poison.

In the second stage when the disease is about to assume the chronic form, after the local bleeding the application of blisters to the joint will prove of great utility. It would be useful to keep up a constant irritation by means of some stimulating liniment. The Lavender or Olive liniment would answer for this purpose. There is generally considerable thickening of the ligaments and joint surfaces in the neighborhood of the joint. It becomes stiff and difficult to extend or flex it. The patient should attempt moderate exercise. Walking is not the method by which he is to be taken care to commence with gentle friction and extension of the limb. When the blisters have healed friction with camphorated Mercurial liniment may be used. The flesh brush is frequently beneficial. The use of the Vapor Bath is a powerful relief, to exert moderate pressure on the diseased part has proved of essential service when the subsequent debility continued long. When effusion follows blisters it should suppose effused if long continued it will rarely fail in removing the effused fluid.

Mercurial Ointment to expedite the action of the above salts may also in this case be employed.

I have as yet said nothing of the advantages to be derived from the administration of purgatives in the treatment of inflamed joints. When the disease is seated in the joints of the lower extremities, the benefit to be obtained by their employment is I think doubtful: for motion is studiously to be avoided. In your plan it is usual to keep the limb elevated by means of a gently inclined plane. The pain and irritation attendant upon moving the patient to obey the calls of nature, would in many cases more than counterbalance the good effects of purgative medicines. They can however be used advantageously in the primary inflammation of the joints, than in the disease to be presently considered. Constipation is always to be avoided; to obviate this the occasional employment of a mild laxative should be attended to.

We often find that from the copious evacuations occasioned by the patient, we are compelled to administer opiates in the inflammatory stage.

When this is the case we may give a full dose, which will procure sleep and prevent delirium and other bad symptoms attending the exhibition of small doses. Three grains of opium combined with fifteen or twenty grains of Carbonate of Magnesia or Prout's powder, will be found of infinite service in

removing the unhealthy dryness of the Skin, and promoting gentle diaphoresis. The diet must be low & complete abstinence from all Spirituous and fermented liquors. Acidulated drinks may be freely employed.

I turn from the present disease to that which is more particularly the subject of this Dissertation.

The term Spina Ventosa is of Arabic origin. It is so called from Spina a Thorn, the disease at the commencement resembling the pricking of a thorn and Ventosa from the joint thought to contain wind. The disease has by systematic writers been divided into Rheumatic & Scrofulous. The disease spoken of above, though not delineated with the accuracy I should wish, is what I conceive to be the Rheumatic White Swelling in its incipient Stage. I forbear speaking of the suppurative Stage until treating of Scrofulous White Swelling.

Spina Ventosa is truly one of the most formidable diseases which the Surgeon has to encounter. It occurs most generally in children and persons between the age of puberty and forty years. It is I think invariably conjoined with a Strumous diathesis. This Constitutional taint can sometimes be traced prior to birth in the Hydrocephalus of Infants. In the Back and Loins constituting Spina Bifida. which is in fact the disease of the Head descending along the Sheath of the Spinal Marrow. In the Joints the disease is called Psoas or

lumbar Abscess. In the Hip Morbus Coxarius. When the Glands are affected it is often erroneously called Scirrus. The Testicle is sometimes affected; but when the hardness and swelling commence in the Epididymus it is Scrofula and not Scirrus. Scrofula never terminates in Scirrus. At the commencement of White Swelling the pain for the most part is generally slight and the patient experiences little uneasiness. When the Hip is affected in Children, the most marked Symptoms are pain, disinclination to walk. The child acquires a habit of walking lame, touching the ground only with the Toes of the affected Side. This also may be seen when the Knee is the seat of the Disease: in this case the joint is kept constantly flexed, and the capability of extending it completely is (entirely) lost. The pain in this Disease usually precedes the Tumefaction. The latter is of a pearl white Colour, interlaced with blue veins. Smooth hard and shining. As the disease progresses all the parts concerned in the Structure of the Articulation gradually become involved. Caries of the heads of the bones and ulceration of the integuments supervene. There is then a thin discharge of Pus mixed with flakes of a cheesy consistency from the abscesses situated around the joint. By some it is maintained that in this disease the Heads of the bones are always preternaturally enlarged. This is denied by Mr. Bransby Cooper who asserts that the Morbid enlargement of Scrofulous joints is made to appear greater than it really is, by the extreme emaciation both above and below the joint

and which generally attends the long continuance of the disorder. The heat of the diseased joint is always considerably augmented, previously to the formation of abscesses. When formed, and they begin to discharge Hectic Fever appears, the pulse becomes small, quick & frequent. The appetite is gone, night sweats and colliquative diarrhea are but the precursors of speedy dissolution.

According to most writers, in the scrofulous disease of the joints, the bones are primarily affected. but the disorder gradually travels from the substance of the joint destroying all the parts concerned in the structure of it. There seems to be a less quantity than usual of earthy matter in the bones affected. This may also be remarked in the Spina Bifida, where cases are enumerated of the total absorption of 3rd 4 vertebra. This however seems too improbable; for the question would instantly be asked, would not injury done the Spinal Marrow be shortly attended with fatal consequences? This seems to be adduced to support the idle Hypothesis of Dr Jones. and is worthy of little notice. Scrofula seems to attack only the spongy extremities of the long bones, or those which are light and cancellated. The swelling is generally hard, and cannot be indented. The joint acquires often a very great size. the integuments preserving their colour and shining appearance. I fully coincide with Mr Cooper in opinion that cases, in which the cancellous structure of the bones is found quite undiseased, and in which the

mass of disease is confined to the soft parts, are not cases of Scrofulous White Swellings." It has been said that persons having attained the age of 25 without having had the least Symptom of Scrofula, after this period of life, can have a Strumous attack of white Swelling. In opposition to this assertion, I will simply relate the case of a Man, seen by me constantly in my attendance at the Pennsylvania Hospital. He was attacked when about 35 years of age, with what seemed only a slight Stiffness in his right knee. The pain became more severe, the Swelling slowly increased. All the Symptoms of confirmed Spina Ventosa succeeded. He was then admitted into the Institution. All the customary remedies were employed without avail. The joint increased in size; finally a fluctuation was perceptable, and the Matter began to flow out by various ulcerated openings. Hectic came on and he appeared gradually to the grave. At this period the disorder seemed to take a stand. The discharge diminished, and a favourable issue was almost hoped for, however uncertain or impossible it appeared. But these appearances proved deceptive. A cough attacked him and all the symptoms of Tuberculous Phthisis, which speedily terminated fatally. In the case of this man there was a complete Metastasis of the disease to the Lungs. On examining them Tubercles were found in every Stage of Maturation. He manifested to the

living all the signs of a strumous diathesis, which were confirmed by his subsequent death.

The evidences of a pro-
-perly formed strumous habit are generally found to
be about to be enumerated. Fair complexion, Blue eyes,
light hair, Large veins, Thick upper lip, Nervous temper-
-ament. &c &c. Such persons are often affected with enlarge-
-ment of the glands of the neck. Affections of the eyes,
presenting the florid edges, which surround the Iris.
The exciting causes of disease in persons of the constitution
just described are innumerable. They cannot always be
traced to the correct source. The disease, already lurk-
-ing in the system, waits only for some slight cause
to bring it into action. Injuries of a trivial nature and
of the time of reception wholly unnoticed by the person,
at a future time, are recognised by the appearance of
disease in some remote part of the system. A simple
contusion, slight sprains are sufficient in some deli-
-cate habits to instantly excite the disorder of which I
am now speaking. These trifling injuries pass un-
-heeded by the person, until the incipient symptoms
of spina ventosa or white swelling become urgent.
Then the slight accident, forgotten for months is
brought to the recollection of the sufferer. Exposure to
cold is by no means an unfrequent cause of this
intractable disorder. A draft of air, sudden stoppage
of perspiration are sufficient to produce it in an

invariable scrofulous constitution. It is remarked by Dr. Brunt of Glasgow in his dissertations upon Inflammation that "causes which would scarcely induce inflammation in a healthy person, may induce a local disease and inflammation in a scrofulous habit." Scrofula be matter under what modification it may appear is now allowed by all writers and practitioners to be a Hereditary disease. This conclusion is proper and warrantable, for it is established by inquiry and minute observation: and as has long since been remarked Hereditary diseases will never be eradicated or annihilated while intermarriage is so prevalent.

But to return from this digression to speak more particularly of certain symptoms noticed and then to conclude this essay with some remarks upon the treatment.

The lymphatic glands of the groin are frequently enlarged from the irritation at the knee; this is remarked by Mr. Russel who further adds that they seldom continue troublesome. The ligaments of the knee are sometimes so debilitated or relaxed that the bones are dislocated backwards or laterally, when this happens little chance of effecting a cure seems to be held out. In examining patients complaining of pain and uneasiness in the knee joint, we are not hastily to satisfy ourselves that the disease is actually seated in such articulation from a single examination. The disease of the hip is often mistaken for that of the knee. And remedies applied to the part where

the complaint has no positive existance. Delay is of great disadvantage to the patient, for it is only in the commencement of the disorder, that by vigorous treatment the Surgeon can at all hope to combat that formidable and distressing Malady.

The curative plan must now occupy the remaining pages of this Essay. And this must differ according to the progress in which we find the Disease; whether in the Acute or Chronic form. In most cases we find Strong Inflammation Seton in the first Stage; in others. The disorder is entirely Chronic. The former can be distinguished by the heat pain and tenderness of the part. Now the Antiphlogistic plan can with Safety and advantage be employed. In all cases, upon the first appearance of disease I would instantly select a horizontal posture for my patient. And upon no account would I permit a relinquishment of it. In many instances, one or two of which came under my own observation, persons who for months had been confined to this position, and the most urgent and alarming Symptoms had long since disappeared, by leaving the bed, and simply walking across the Chamber, all the Symptoms manifested in the first Stage, have in the course of a few hours returned, doubly aggravated. Thus the Labour, Care, and Attention of the practitioner are undone, by the obstinacy and wilfulness of the patient.

the limb, I would elevate. In all diseases of the joints I would employ the inclined plane. General & severe blood letting is to be avoided. Fomentations to the part. Hot or cold as may suit the feelings of the patient. The former seem to suit delicate constitutions best. Poultices are much recommended by some writers. The cicuta poultice. Nothing suits me. There no doubt are cases of severe. But poultices and Fomentations are I think of but little, if any efficacy, after the reduction of the inflammation in the first stage. The application of Blisters is much to be avoided. I am much disposed to think favourably of them. I would apply them on each side of the joint. And keep them open by the savin ointment. Some writers recommend us to put on one at a time, and when it heals on one side apply one on the opposite. The advantage of this I cannot estimate. A large blister scarcely gives more pain than a small one; instead therefore of applying one of the size of half a crown, I would place them of such a size as to completely cover the seat of the inflammation. In preference to Blisters I would employ Caustic Issues. They are slick to occasion more pain than blisters in the first application of them. but finally becoming indolent ones, cease to be very sensitive. The Ancients were in the habit of applying both the actual and potential cautery. The former is once more coming into repute, under the authority of Baron Larrey. According to the evidence of this

distinguished Surgeon, the Chloryla is capable of curing many of the most inveterate diseases. The Public seem about to be divested of more than half its terrors, upon the employment of this remedy, and Scrofula no longer continue to be the opprobium Medicorum. This very humane minded would wish to be the result of its trial. But the experience of ages long passed, cannot testify its efficacy. It doubtless may be of service in some cases but that it unequivocally will cure pulmonary consumption I cannot for one moment believe. The potential cautery I would in Spina Ventosa apply on each side of the joint. Often in the Hip, behind the great Trochanter, the Spina Bifida on each side of the Spinous process, they should never be suffered to heal, and steady discharge is to be maintained. The Bowels are to be kept open by Mild Saline purgatives. Cicuta has been employed I think with advantage. It lessens pain and irritability, but not producing constipation should be preferred to opium.

Often all our endeavours sometimes fail. Suppuration slowly to come on, accompanied by Hectic Fever, our plan of treatment we must now alter. The powers of the System are to be supported. Hectic Fever has been said to be produced by the absorption of pus. This certainly is an error but could be contradicted by almost every days observation. Often large quantities of matter are absorbed, without

injury to the System. Hectic arises from the irritation in the System at large, and not from the absorption of Pus. The Tonic plan of treatment at this conjuncture is to be employed. Diarrhœa is to be guarded against by the administration of opium. The treatment to be adopted is that usually pursued in the declining stage of Phthisis.

But in this disease we often have one ultimate though unwonted alternative. Amputation seems indeed really the "ultimum Moriendi". But even here no surety appears for in the case detailed in the former part of this essay we find the Lungs finally suppurated.

I must here though unwillingly drop the further consideration of Spina Ventosa. The original Ideas or Methods of cure we made known. Beyond compilation I dare not venture, with all its errors and imperfections therefore, I submit it to the consideration of the Faculty of the University of Maryland, by whom the Merits and Publications of the writer have with Justice and Impartiality been tested.

Dissertatio

de

Hepatitide acutâ

dedicata Præposito, Gubernatoribus

et Facultati

Universitatis Marylandicæ

ut obtineat Gradum

Doctoris Medicinæ

Johanne Carr

auctore

Hepatitis frequentissime occurrit in regionibus calidis. Species morbi acuta repente supervenit cum potestate magnâ, presertim in his locis ubi endemice pollet; exempli gratiâ per littus oranum Coromandelæ. quando subito et violenter incursio accidit, dolor aegrum occupat in hypochondrio dextro, cum sensu constrictionis trans abdomen. vix sine ullis prioribus symptomatibus, dyspnœa, atque impotentia in situ recumbente manere sese ostendunt. in terris mutioribus. Specie tardiori et minus acri occurrit. dolor comitans inflammationem acutam hepatis proclivis est. se propagare ad pectus, clavicularn et humerum lateris dextri atque interdum sinistri. cum hepar interne inflammatur dolor gravis et asper est: Sed ubi superficies aut ligamenta afficiuntur. dolor acutus, tensus atque pungens est. pressura in hypochondrio dextro. in illâ parte magnopere auget dolorem. cubitus latere sinistro jacere non eandem facit, etiamsi interdum non ita est.

ager sentiens requiem nascentem in latere sinistro. tussis arida atque molesta cum dyspnoâ hunc morbum plus vel minus comunitur comitatur. in hepatitide acutâ nausea et vomitus biliosa frequenter occurrunt et plerumque quo magis symptomata illa gravida sunt tanto minus tussis et dyspnoea ab aegro sentiuntur. saepe sensus est gravis anxietatis juxta ensiformem et praecordia suspiratione frequenti comitante. praecipue cum pressura fit in hypochondrio dextro et sub scapulâ dextrâ. plus aut minus coloris icterici albugineis et cutis circa pectus. faciem. atque cervicem symptoma constantissimum est. urina etiam nascente imbuitur bili satis plerumque violens est. cuticula et calida. pulsus est plenus. agilis atque tensus. lingua obducitur albâ pelle aut luteolâ. gustus amarus. intestina fere astricta sunt, tamen diarrhoea saepe a principio morbi instans est. diagnosis. dolor in clavículâ dextra et humero. signum certissimum hepatitidis plerumque existat.

Hepatitis a peripneumonia dignosci potest ab symptomatibus sequentibus. in pleuritide, tussis atque oppressio in pectore multo magis gravior, quam in hepatitide. in hepatitide ager melius quiescit in latere affecto morbo, in pleuritide contrarium occurrit. in hepatitide pressura in hypochondrio dextro dolorem maxime adget, dum pressura in spatiis intercostalibus, incrementum peripneumon aut multum doloris efficit. cum substantia pulmonis inflammatur, dyspnoea atque dolor augentur ab agro jacente latere integro, qui in hepatitide accidit; sed in affecto potius respiratio maxime perficitur ab musculis intercostalibus diaphragmate et musculis abdominis. hepatitis a stomachi inflammatione facile dignosci potest. in posteriori pulsus plenum fere contractus atque debilis, dum in priori, pulsus est magis plenus et durus. in gastritide multum prostrationis musculorum adest a principio morbi, et quicquid in stomachum receptum est extemplo rejicitur; in hepatitide robur corporis non multum imminutum primum

et quamvis vomitus frequens accidat ab ipsa
vis non tam facile excitatur quam in
Gastritide. in pleuri praesentia in hypochon-
drio dextro, in posteriori praesentia in epi-
gastrio plus doloris facit
cum inflammatio peritonaei restricta est
semper plus doloris atque febris. quam
cum structura hepatis sedes est morbi
hepatitis acuta raro durat ultra diem
sextum aut septimum sine inclinatione
desinere in resolutione vel suppuratione.
quando posterius evenit. dolor moderatus
fit. aeger sentit oppressionem et palpi-
tationem in regione hepatis cum rugosis
incertis; plus hoc minus ve sudoris copiosi
nocturni. sensus subsidentis est; anxietas et
oppressio in praecordiis, cuticula arida atque
viscida. sensus formicationis adsunt. interdu-
um lobus totus dexter abscessus vastus prope
fit interdum adhaesiones occurrunt inter partes
circumdantes abscessum hepaticum et faciem
internam abdominis. quando hoc evenit et
abscessus extra prominet, pus dimittatur pun-
ctura aut incisione. atque aeger sanetur
ubi abscessus extra prominere incipit, plen-
itudo generalis, distensio, atque dolor in rego-
ne hepatis et epigastrii parum augebitur

prius quam suppuratio incipit; sed suppuratione exterius procedente; tumor mollis circumscriptus apparet, dum plenitudo generalis et teneritas in hypochondrio dextro plerumque subsident, ubi abscessus progreditur subter costas falsas, vel satis percipiendus est prope regionem epigastrii; quando altius vel posterius prominet, ut progrediatur subter costas; tum distensio hypochondrii tantum designatur splendedine spatiorum intercostalium, dolore, et teneritate eius loci fere astrictis. Cum adhesiones contingunt inter hepar et diaphragma abscessus sæpe prorumpit in cavitatem thoracis. expectoratio purulenta interdum comitatur hepatitidem, ob inflammationem extendentem ad membranam mucosam structuræ pulmonum. Sine communicatione directâ inter abscessum in hepate et cavitatem. gangræna quoque in inflammatione hepatitidis. aliquando morbus desinit in mollitie hepatis. Causa Miasmata certe habent potestatem peracutam turbare functiones hepatis. Sunt quoque alia multa causa. videlicet. impulsus subitus aurae frigidae nocturnae: errores in dietâ atque turbatio gastrica, exercitatio dis

lens et fatigans; contusiones hypochondrii dextri; translatio podagræ et rheumatismi; vulnera atque injuriæ cranii, mutationes atmosphericæ. excitatio mentis; terror atque desperatio inflammationem acutam hepatis gignerent. Curatio in hoc morbo abstractio sanguinis est remedium valde necessarium. Semel ac sanguis abstractus est, ut fiat impressionem manifestam in Systemate. cathartica mercurialis administranda est, a quindecim ad grana viginti hydrargyri Submuriatis, portione olei ricini sequente; præcipue præstans atque potens cathartica est. Sæpe oportet frequenter sanguinem abstrahere inter primos septem dies, primoquam actio cordis permanenter redigitur. applicatio hirudinum ad epigastrium et hypochondrium magnopere adjuvabit hepaticam inflammationem diminuere per cursum totum morbi. cataplasma in statu solato servarentur. hydrargyri Submurias inter cathartica potest præcipuum remedium constituere debet ab octo usque ad duodecim grana hujus præparationis incipias

proscribere sextâ quâquâ horâ et sequi exhibitionem ejus parvâ dosi Glauberi Salis, aut olei ricini, aut infusionis Sennæ et Mannæ. Si post decem vel duodecim horas, hydrargyri Submuriatis liberas evacuationes non procuret, ubi reactio arterialis generalis monuerit, depletione directâ atque locali, atque intestina evacuantur, uteremur maxime inclinatione expectitâ ptyalismi modici, cum vesicatoriis aspellicatis regioni hepatis atque purgatione moderatâ. Consuetudo opii administrandi, et hydrargyri Submuriatis in hoc affectu, præsertim cum excitatio phlogistica reducitur, venesectione olim magnopere laudabatur. Tria vel quatuor grana hydrargyri Submuriatis cum dimidio grano opii quâquâ quâtâ horâ usque quo, decet administrare et continuare exhibitionem ejus, donec gingivæ manifeste salivantur. Additis gehorum duorum vel trium pulveris antimonialis, ad singulam dosin hydrargyri Submuriatis et opii, præstabit utilitatem, non modo potestate diaphoretica. Sed etiam inclinatione parare in actionem ptyalismi. Sit nobis materia

Cura quam primum systema fere sub sub potentia mercuriali. inter administrationem horum medicaminum, plerumque necesse erit per intervalla exhibere dosin olei ricini, vel unum cathareticorum salsorum. applicatis vesicatoriorum satis amplorum extendere trans regionem totam hypochondrii et ejusdem remedium utilissimum est. postquam sanguis efficienter abstractus est hydrargyri submurias et antimonium muriatum moderentur, ut auxilia ubi stomachus non nimis irritatus est pulvis antimonialis. in dosibus gradatim crescentibus, detur. vel cum hydrargyri submuriate, vel ophio, vel cum potassæ nitrate, vel potassæ sulphate, singulâ horâ tertiâ vel quartâ; et auxiliari operationi diaphoreticæ harum medicinarum usque quam effectis specificis mercurii balneum tepidum, maximum communem præstabit. quando inflammatio in suppuratione terminat, evacuationi indicatur. a rigoribus sensim subsidentis et absentatis in pure cordis, sudoribus nocturnis atque

interdum fornicatione cutis. cum
plenitudine et sensu fluctuationis circa
marginem costarum et cum do-
lore obtuso atque exasperante usque
ad ulcerosa mercurii. insuperius est. Si
symptomata localia atque status
pulsûs et systematis videntur requi-
rere. applicatio fumigationum fa-
carum in secundate venesectio-
nis commoditer proficiet. et deinde
cataplasmata assidue applicari debent. ut fave-
ant abscessui prominere extra. intestina quoque
eo ordine evacuari debent postquam abscessus
formatus est, a quinque vel sex grani hy-
drargyri submuriatis. paulo post dosi pulveris
sulphatis magnesiæ sequente. cum abscessus
non prominet. nihil amplius fieri potest
quam symptomata levire. simul ac surgunt
atque eventum expectare. quando venit, ut
abscessus extra promineat. atque fluctuatio
pulvis distincte sentiatur. aperio fiat. et exitus
ei tribuerentur. quando dolor et plenitudo gra-
vatis minuuntur. et suppurantur. a distinc-
to tumore. sine dolore acuto. molli. et fluctu-
ante. in apice. vel habente vim resilientis
mollem atque levem lividitatem. vel rubedi-
nem superficiei. operatio suscipiatur. cum omni

expectatione successus. ubi Suppuratio occurrit et pus exitum propitium invenit. fortasse nullum remedium est. quod præbeat tantum commodum. æque. ut nitro-muriaticum acidum. licet adhibere interne atque externe. velut balneum pedum. æquæ partes nitrici atque muriatici acidi. ratio est. in quâ usus est adhibere. a dimidiâ usque ad totam drachmam hujus mixturæ. dilutæ in sufficienti quantitate aquæ. quotidie capiatur; et cavere ut acidum ne noceat dentibus. sugi debet per pravum vitreum tubum. vel calamum: aut pedes et crura immergantur ab triginta ad quadraginta momenta. singulo vespere in balneo tepido potentiæ. primum. dimidiæ unciæ. acida mixturæ. ad congium aquæ. et deinde paulatim oportet augere in potentiâ ad Summam sex vel octo drachmarum. ad congium. multum utilitatis quoque efficiatur. in Suppuratione hepatis. a pravis dosibus muriatis mercurii. cum extracto cicutæ. in ratione decimi: grani pilulis usque ad duo grana posteriores. ter in die. nitricum acidum semel cum laudano. hyoscyamo. aut Conio. magnam utilitatem præstabit. præsertim cum abscessus in pulmones... provenisset. Finis

An

Inaugeral Dissertation

on

Puerperal Fever

Submitted to the

Consideration of the Provost. Professors

and Trustees of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Garrett Alvater. of

Baltimore. Md.

Member of the Baltimore

Medical Society

To Doctor. Hollendinew.

Under whose able guidance
I have prosecuted and closed my Medical
Studies, this Essay is Respectfully inscribed.
by his Friend and Pupil
Garrett Altwater.

Introduction.

Among the many difficulties which the Medical Student, has to encounter, that of preparing an Inaugural Dissertation is not the least trying. The selecting of a subject adapted to his experience, ability, and information perplexies him, and when selected, he is aware that it must undergo the scrutiny of men whom fame has placed in the very rank of the profession to which they belong, and to whom many of his views, must appear trite and common, or perhaps false and unfounded. But one reflection is at least encouraging, that the Medical Faculty of the University of Maryland are not less characterized by their skill and learning, than by their candour and liberality; Qualities which will ensure him not only a lenient criticism but if necessary a generous indulgence. Impressed with the truth of these, and in compliance with an established regulation of the University which will admit of no evasion - I have been enduced to offer for the consideration of

the Faculty the following, brief and concise remarks on Puerperal Fever. I do not claim the meed of originality, This cannot be expected from a mere pupil in the School of Medicine. All that I expect or desire is that the selection and condensation which I have made of the opinions of others, may be found to be judicious and correct.

Puerperal Fever.

"By puerperal fever we understand that disease which attacks the woman almost immediately, or within a few days after delivery; and is distinguished from every other affection of the febrile kind, by its being always attended by a highly accelerated pulse; a painful soreness of the abdomen; with more or less distension (after a short time) of this cavity.

However authors may disagree about the nature of this disease; its remote and proximate causes; its mode of treatment; its

specific nature; they nevertheless, one and all consent to consider the marks just stated, to be its pathognomonic symptoms. And perhaps in no disease of the febrile kind, can so many peculiarities be enumerated, as almost constantly present themselves in this; such as the highly accelerated pulse, the failure in the secretion of the milk, if it has not taken place previous to the attack of the disease; its immediate arrest if it has taken place; the diminution, or suppression of the Lochia; the constipated condition of the bowels; the peculiar character of the alvine discharges; the exemption for the most part, from Delerium; the loss of maternal feeling &c.

The fatal character of this disease is almost proverbial. Dr Denman declares that it occasions the death of much the greater part of those who die in Childbed; "Dr Clark says perhaps there is scarcely a disease which we are acquainted with, whose consequences are more fatal than this: as far as I have observed, three fourths of those who have been seized, have fallen sacrifices to its severity."

Predisposing Causes.

It has been said by some that difficult labour has considerable influence in the production of this disease. To this however we cannot subscribe; for cases are on record of its taking place before delivery, and even when Peritoneal inflammation occurs in the Male the same Phenomena present themselves; and Doctor Armstrong assures us that it does not seem to depend upon the difficulty of labour, for in most of the women in whom it occured parturition was remarkably easy and the placenta was cast off after the proper intervals and without more than usual pain. Nor was the Lochial discharge before the attack in any way apparently affected, and Hey says, I have scarcely known an instance in my own practice of this disease coming on after a preternatural labour. It has on the contrary most frequently occured within the compass of my Experience after the most easy and natural labour, Clark however is of a different opinion. He says "for some reason or other there seems to be a great aptitude in the Peritoneum to be inflamed after delivery

so that causes applied to the body which generally have a tendency to excite inflammation of internal parts seem to be peculiarly directed in their operation to this part during the time of childbed". but the Hypothesis of Clark is contradicted by almost every other writer, for they declare that the severity of the act of Parturition has no agency in producing the disease and Doctor Denman informs us that women are certainly not attacked so often with this Fever after difficult labours. Hunters opinion was that it ought to be attributed to some injury done to the Peritoneum in forming a cavity. Doctor Good however successfully controverts this.

It would appear to us that Debility or Irritability in consequence of some debilitating or irritating cause acting upon the system has its share in producing this affection this in conjunction with the irritable or agitated state of the mind at the time has we have no doubt often produced it. But of all the causes we think there is none that exerts a greater influence than that of a vitiated condition of the

Atmosphere. This is the reason why it is so frequently found in the lower class, where a number of families are crowded into a small House, and where no attention is paid to Ventilation. To the same cause doubtless, is to be attributed its frequency in Hospitals and other Public institutions, where the patients are confined in wards, which are often kept close, consequently the atmosphere is rendered impure and unfit for Respiration.

The retention of fecal matter also predisposes to this disease: sedentary employments, disturbed rest, night watching and fashionable dissipations might be enumerated among the Predisposing causes, in a word any thing that debilitates the system rendering it more susceptible to the surrounding stimuli by increasing the excitability, acts as a predisponent.

Exciting Causes.

Among the exciting causes may be enumerated improper treatment during labour such as the too often introducing the Hand, so as to produce irritation of the Os Tincæ and the adjoining parts, and also a too hasty separation

of the Placenta; and we have no doubt that long continued application of cold as is frequent in Uterine Hemorrhages produces the disease. But these are trivial compared to the officious interference of the ignorant midwife; no sooner is the child born, than the mother is immediately taken out of bed and exposed to the chillness of the room, not content with this and thinking the patient must be debilitated strong stimulating drinks are now administered, and the patient put upon a nutritious diet. In summing up the exciting causes we may mention that of imprudence during parturition. External heat, stimuli of all kinds and cold applications are the most frequent exciting causes.

We shall not stop to discuss the point how of the contagiousness of this disease we only shall adduce the opinions of few, whose talents, judgement and ample experience have rendered them qualified to decide upon the subject. Doctor Hulme says "that the Puerperal Fever is not an infectious disease any more than the Iliac passion, a Pleurisy, a Nephretis or an Inflammation in any other part of the body." and Doctor Hull who practiced

extensively says. "that as far as my observations goes Peritonitis Puerperalis is not infectious." Hey appears unwilling to decide positively but inclines to its non contagiousness. Dictor Dewees denies it in toto and says "in his opinion it is altogether without foundation at least in this country". After thus cursorily noticing the causes we pass to the Symptoms.

Symptoms.

Authors differ respecting the time that this disease makes its appearance. Armstrong says from Twenty four to Thirty Hours after Delivery. Hey fixes the time about Fourty eight hours. Clark any time between the Second and eight day. generally speaking it is preceded by a chill or slight rigor. This however is not necessary for the formation of the disease. When it does exist we may generally prognosticate the violence of the subsequent symptoms, they being in direct ratio with it. Nausea retching vomiting and pain in the præcordia also frequently precede it.

After these symptoms have continued for awhile they give way to those of excitement; the skin now becomes unusually hot and dry, the thirst is

very urgent, the pulse is preternaturally frequent, tho sometimes it is full - the countenance at this period assumes an inexpressible anxiety, the cheeks are flushed with a circumscribed redness analagous to the Hectic flush, the tongue also is in a morbid condition sometimes dry and at others moist. Doctor Armstrong says "it has the appearance of being rubbed with fine white powder." Sometimes it is covered with a thick white or brownish fur, respiration is also impaired, generally being hurried and attended with considerable sighing. The urine is voided with pain and as might be expected considerably diminished, frequently it is turbid, the Bowels are in a disordered condition sometimes constipation exist and at others there is a Diarrhea - Although pain in the head and Vertigo sometimes exist, yet it is a peculiarity of this disease that delerium is seldom present, so says Doctor Dewees. A peculiar symptom observed at this time is the want of Maternal feeling, the Mother refusing to give suck or even to notice her offspring. Doctor Armstrong says that these symptoms constituting the first stage of the disease, continue about

Fifty hours when the disease passes into the second stage. The approach of which is indicated by the rising of the pulse which is now from 140 to 160 and is very soft and compressible. For some time after the accession of this stage the skin remains dry and at an increased temperature but the patient almost constantly complains of chilliness. the cheeks are alternately flushed and deadly pale, the eyes lose their lustre, the pupils are dilated, the pain gradually and entirely recedes from the abdomen, the tongue for the most part is brown or rather black and parched, Aptha also exists; there is almost perpetual vomiting, the matter which is thrown up very much resembles coffee grounds and has an offensive smell. the teeth and gums are crusted with dark slimy sordes and the breath has a very disagreeable smell. The patient now talks incoherently, sometimes she flatters with a hope of getting well; this however is only a deceitful prelude of what is to come. a few hours before death Petechia make their appearance, the whole surface feels soft relaxed and clammy, these with many other symptoms

such as Coma, convulsions, involuntary discharge of faces and urine continue for a greater or less space of time, when death comes and closes the fatal scene. After death the body becomes livid and very offensive to the smell and the abdomen is immensely distended.

Diagnosis.

Nosologists have made a distinction between Puerperal Fever and simple Peritonetis, but as for ourselves we are of the opinion that as well as this may do for the closet, it can be of no practical importance at the bed side. Considering these diseases as the same we shall not of course enumerate the Diagnostics which have been given - there are some diseases however with which it may be confounded if the practitioner is not on his guard, such as Milk Fever, after Pains, inflammation of the Uterus, and the Ephemera called the weed to which childbed women are liable.

The Milk Fever is known principally by the throbbing irritation and Enlargement of the breast, and by the pain being confined to the mamma, now in the disease under consideration the pain commences and continues in the abdomen, whilst the breast is not necessarily

affected. On the contrary they are generally more flaccid than natural, and in addition to this the pulse is more frequent than in Milk fever. The after Pains in puerperal does not produce the excruciating pain that it does in Peritoneal inflammation; indeed the abdomen in this last affection is so painfull that the slightest pressure cannot be borne. Besides this the pain itself is different; in the one it partakes of the nature of labour pains, that is of a grinding sensation, and it also recurs by paroxysms, whereas in the other it is of a very acute nature, and unceasing. The pulse is also a good Diagnostic in the one it is natural or nearly so, whereas in the other, it is febrile from the commencement. In a practical point of the subject we do not conceive it necessary to lay down the distinguishing symptoms between this disease and inflammation of the womb, as the practitioner can readily form an idea of the symptoms that would present themselves, and if Puerperal Fever does as will be shown hereafter consists in an inflammation of the Peritoneum, the treatment of both must be conducted on the same general principals.

The invasion of the Ephemera is very apt to deceive the practitioner, as it is generally ushered in by a chill or slight rigors and is followed by heat, thirst and general excitement, but these symptoms are generally terminated in twenty four or thirty hours, and the absence of abdominal irritation sufficiently distinguishes them. In conclusion we would say that Puerperal Fever may be known by its being preceded by a chill general excitement succeeding this, considerable pain and tension in the Abdomen increased by pressure, the pulse very frequent and a non secretion of Milk, attended with a deranged state of the Lochial discharge.

Prognosis.

From the earliest period of Medical Science this disease has been viewed as one of imminent danger, and the reason of this is the fatality of the disease and that often when the most prompt and judicious treatment has been pursued.

In forming our prognosis several Extraneous circumstances must be taken into consideration, first the Habits of the patient. If she is given to intoxication or the making use of Ardent Spirits it will be so much the more unfavorable.

If she is confined in a Hospital or other places of a similar character our prospects of recovery will be diminished, Also her situation in life; if she is among friends to whom all requisite attention will be paid to her conveniences and nursings we may expect a favourable issue, Among the symptoms which augur an unfavourable termination may be mentioned the following the earliness of its approach; all writers agree on the unfavourableness of this symptom; also, mental derangement, and if there is much pain and tenderness of the Abdomen at the same time in conjunction with the symptoms before mentioned viz an absence of maternal feeling we may almost certainly Prognosticate evil, Constipation is also to be look'd upon as an unfavourable circumstance, On the contrary a diminution in the frequency of the pulse with an increase of its volume, a subsidence of the abdomen with a moderately lax state of the bowels, a tranquil state, a secretion of milk, with an interest for the welfare of the child, and a restoration of the Lochial discharge with a moderate the general perspiration, may be look'd upon as favourable symptoms.

Pathology.

It is not our intention upon the present occasion to enter into a discussion of the different views which have been given by authors of this disease; we have already said that it might practically speaking be considered the same as Peritonitis. Some have contended for the Typhoid character of this disease, but we shall merely give what we conceive to be a correct view of the subject, and that is concisely as possible. We would then say most unhesitatingly that Puerperal Fever is an highly inflammatory affection and it affords us pleasure to adduce in support of the above opinion, the names of Denman, Hulme, Leake, Gordon and Armstrong and it is the opinion of our very worthy Professor of Obstetricks in this University that it should be classed among the Phlegmasiæ. Doctor Armstrong after having incontrovertibly proved the inflammatory nature of this disease by the most respectable authority and by direct appeal to Post Mortem Examination, says "that from all that has been advanced then, it may be laid down as a general proposition that

Abdominal inflammation directly or indirectly is the cause of the fatal terminations of all the varieties of Puerperal Fever. again in all those dipections which I have witnessed the most unquestionable proofs of abdominal inflammation existed." Doctor Dewees speaking on the subject says "that Post mortem examination have satisfactorily shown Puerperal Fever to consist in Peritoneal inflammation". We would here observe that this inflammation does not confine itself to any particular part of the membrane; on the contrary the Mesentery. Omentum. the Liver. the Mesicolon in a word every portion of the Abdominal contents may be the seat of this inflammation. Nay even the Pleura and Lungs have been found involved in it. the most general termination of this inflammation is in effusion or suppuration and very rarely if at all in gangrene. A considerable quantity of coaguable lymph is sometimes thrown out so as to agglutinate the intestines and other Abdominal Viscera.

Treatment.

Correct views being entertained of the Pathological condition of the system in Puerperal fever the treatment of course is easy. One reason why the treatment of Puerperal Fever is not more successful is the deceitful appearance of debility which is observable in the commencement of the disease, but there is great difference between apparent and real debility. In the one the powers of the system are actually exausted, while in the other they are depressed but not subdued this state of debility can only be removed by active depletion. In the commencement of our remarks upon the treatment of this formidable affection we would say that the Practitioner must always be guided by symptoms and not by names, in a word it is impossible to lay down any plan of treatment which must be pursued in every case. The good sense and judgement of the Physician must decide. For instance a patient naturally of a nervous temperament and confined in an ill ventilated apartment breathing an

pure air, and every other circumstance of a debilitating
nature, will not bear depletion as well as where
the converse exists. We then say that Puerperal
fever is a disease which if succesfully treated
must be taken in hand very soon, and the most
active treatment must be pursued in the
stage of excitement. Among the different
remedies to be employed there are none which
stand more conspicuous than Bloodletting;
indeed this is our sheet anchor, In bleeding we
must not be influenced by the quantity drawn,
but by the effects produced; we must bleed
untill the pulse is altered, the pain abated,
and the fever diminished; and there is a
disposition to Syncope. One such bleeding as
this at the proper time is worth more than
double the quantity at any other period. If
the system should again react, and the same
symptoms make their appearance we must
bleed again, we are compelled again in
concluding our remarks on bloodletting to
say that the practitioner must depend upon
his own judgement.

The next remedy in point of importance is Purgatives, all writers agree respecting the benefit which may be derived from the administration of this class of remedies. While they remove the feculent matter accumulated in the intestines which is a considerable source of irritation, they also act usefully by the depletion which they produce. Doctor Armstrong speaks in the highest terms of Purgatives in conjunction with Bloodletting; indeed he appears to think that the success of the antiphlogistic plan is in a great measure depending upon them. Hyd Sub Mur gr x given immediately after bloodletting and succeeded by a draught of the Saline purgative, which will assist the operation of the Calomel and also act as a febrifuge. Castor Oil is also a very good purgative.

Emetics. have been advised by some but we think their use can be dispensed with; they are only in the way of better remedies.

Mercurial Frictions. These have been highly recommended, and we have no doubt after proper Evacuants have been used, that the

constitutional effects of Mercury would exert a decided influence upon the disease.

Fomentations. In all abdominal inflammations warm fomentations may be used beneficially.

Blisters. These are not to be used in the acme of the stage of excitement, as they would only increase the disease but after the more inflammatory symptoms have been subdued by active depletion they may be applied with advantage. In finishing our remarks upon the treatment of this disease, we would say that active depletion both local and general ~~is~~ to be used in the stage of Excitement, and to be succeeded by Purgatives - these constitute the most important item in the treatment of the disease Blisters, Mercurial inunctions and Fomentations may sometimes be used with advantage.

Dissertatio

de Circulatione Sanguinis

in vivo

Præsidi Professorum Regentiumque

pro gradu

Doctoris Medicinæ

Academiæ Terræ Mariæ

subjecta

hoc primo die Martii

a Samuele Laurason

Cum videmus volumen quod Circulatione sanguinis scriptum est, quemque dubitationem, quae ad eam rem pertinet exspectauemus remoui; Sed haec non est vera. Licet phenomenon confirmatur, attamen causae ejus adhuc medicis auctoribus, disputantur.

Illustris Harvy, quum circulationem invenit, spectans cordis musculosam potentiam, et videns in structuram arteriarum nullum musculi naturaliter sapientesque concludebat, ut id potest nobilissimam rem perducere:

In ea sententia, quibusdam ex eminentibus medicis, in hac illuminata aera scientiae medicae, sectatus est: Dum alii, aeque validi et excelsae distincti, accusationem consecutionum negavere, et

putant arterias, eosdem circulando sanguinem adjuvare. Haec vero philosophorum medicorum docet, arterias et capillaria vasa musculosos tubos esse, exercendi aptos actuosam potentiam columna sanguinis, parietibus intro, et in hoc modo adjuvant eosdem.

Opponens vero negavit arterias ullam musculosam contractionem possidere, sed dabit eis vim nisi exercendi, propertate qua, possunt, pressuram perpetuam columna sanguinis, exercere et in hoc modo magnitudinem, ei continentae accommodare.

Inducor quamque cum Harvej assentire, tamen confateor facto amica opponentibus esse pertinacia, et difficile removi

Ea, in densa et tenace membrana inclusus, in

pectore locatur, mediae lineae corporis parum ob-
=liquus, inter pulmonibus duobus, et iis obtegitur.

In totum pene carnis musculosi, cum vestimento
interno membranae laevis delicataeque, constituitur.
Quatuor cava continet. Duo, auriculi denomina-
=tur, duo, ventriculi. Igitur est duplex cor, cor-
=des simplices duos continens. Primus a Bichat
vocatur Systemicus, quia fons est sanguinis
omnibus partibus corporis, alter, a circulando
vitalem fluidum pulmones per, pulmonicus.

Inter auriculos et ventriculos, valvae
interpositae sunt. Scilicet valva tricuspis,
aperturam inter duo dextera, claudens, et
mitral, inter duo sinistra cava.

Valvae, eorum et originem magnarum ar-
=teriarum interpositae sunt.

Aorta, a sinistro ventriculo emanat, et di-
=videns in ramos innumerabiles, omne cor-
=pus sanguine arteriale suppeditat. Hae
rami in minores palmites iterum dividunt,
quae, intermedium arterias et venas constitu-
=unt. Venae hic oriuntur, quae, sanguinem
ventriculum dexterum, rediunt. Eodem tem-
=pore, sanguis, superiore dimidio corporis, in
eundem cavum. Duo rivi, auriculum dis-
=tendentes, contrahere excitatur. Cum cruor
in ventriculum dextrum ejicitur, et partim
auriculum refluit. Ventriculus, distenans,
nunc cavum ejus contrahit, quum fluidum
valva praeventum auriculum refluente, ad
pulmonicam arteriam movere jubetur.

sanguis, nunc subjectus presumae arteriosae,
sine resiliente sive musculosa proprietate o-
riens, tamen res disputationis apud medicis.
adversus pulmoneas venas cuvit, ubi actioni
aeris exponitur, novum animum redintegrare,
obscuro processu, magnum colorem et pestif-
eras proprietates venosi sanguinis, repudiens.
et arteriosam virtutem, assumens, in florida re-
vitate et puritate, ad sinistrum auriculum,
cursum dirigit, in quatuor venis intrans.
cavum ejus renovato cruore contrahens, sinis-
trum ventriculum propellit. contractione cujus,
cogitur fluere aortam, alterum circulum nutri-
tium per corpus movere, suppeditans materias
incrementi et vitae omnibus partibus.

Descriptus circulationem brevitur, nunc causas ejus considero. Structura arteriosa apparet mihi punctum esse, quo omnis res revolvit. Harvey, cum, anno domini 1619, magnam inventionem medico mundo offerebat et rebus multis eam sine dubio probabat, in sequente modo putabat. Cordem, in mirabile opere actorem solum, fecit. Judicabat, arterias tantum ductores esse sanguinis variis partibus animalis. Venae, in sententia ei, cum capillaribus vasis arteriarum continuae sunt, et cordi, propellentae machinae, alterum fluidum redire. Haec, magna seu aortica circulatio vocabatur. Circulatio pulmones per, unum minorem constituebat, quae pulmonea nominabatur. Haec hypothesis, manifeste simplex sic, plerumque recipebatur, donec Bichat accurationem ejus negabat et alterum

putabat
substituebat. Harvy arterias magnitudinem rei in-
=clusae aptare, sed opponebat eas musculares esse, et,
cum respectu sententiis doctoris, in academia Mary-
=landica, physiologiae, emendate puto. Proprietas mus
=culosa arteriarum, a Haller Magendie et Bichat
negatur, dum Hunter Home Soemering et Thom-
=son adscribitur. Nunc ideam aliquanto adaequatam
rei controversae difficultatum, formemus, quum
auctoritatem duorum partium consideramus.
Homines qui constituunt stellas splendidissimas
in medicinae coelum. Hi distincti viri difficultates rei scientes, inquisitiones ad ultimum ingenii,
extendebant, sed rationibus et argumentis validis
non potuere confirmare. Argumenta Bichat ad-
=versus proprietates musculosas ~~adversus~~ arteriarum
sunt, primum, eorum immutabilitatem cum

galvanici fluidi irritationi subjicentur. Secundum
ut conditio est omnium excavatorum et muscu-
=sum tuborum, nulla signa contractionis manifes-
=tant cum in longum dividuntur, exempli gratia.
intestinum tenue. Tertium, quando arteria a cor-
=pore disjungitur, nullum contractionis exhibit,
et si digitus inscribitur, nulla compressio percipitur.
=Magendie dicit, arterias, nullam indicationem mus
=culi nullibi exhibere. Quando, acutis instru-
=mentis, caustico medicamento, et galvanico circu-
=itu irritantur, immutabiles remanent. Natura
=les proprietates arteriarum, ab iis musculorum
valde differunt. Arteriosa materia, secundum
Craige, densus, resiliens, fragilis est, et ligatura
facile divisa est. Musculosa fibra plus laxa est,
neque quam resiliens, nec ligatura potuit dividi,

sed, specium strangulationis tolerat. Actio alcoholis, et acidarum rerum, et calor a fluidis callidis non convelis oriens, in arteriosa tunica, specium contractionis producit; sed nullus effectus similaris muscu-losa fibra accurrit. Berzelius affirmat, propriam tunicam arteriosam, nullam fibrinam continere. Beclard quo modo asserit arterias partem rei ejus habere, sed tamen putabat non eas musculares esse. Arteriosae fibrae, nullo modo, similaris iis muscu-lorum oculis apparent. Fibris pallidis circum-venientibus arteriam oblique formantes. Louain dicit, eas de sectione parvum glutinem et fibrinam nullam, cedere. Cognoscitur bene, arterias membri amputati justa amputationem non actionem pal-pulli agnoscere. Dum, musculi contractionem vitalem retinent. Apparet mihi, experimento Pytheas,

in hac re, decretoria esse. In aeta hominis, post mor-
=tem serpim, quando cor et musculi effectis galvan-
=ici actionis respondebant, nullam contractionem in-
=venit. In oesophago arteriis canis viventis, aeque frus-
trabatur. Haec ei probare vident arteriosam structuram
communiter musculosam, perpaucas proprietates ha-
=bere. Sed haec experimenta his opponentur quae
=Thompson Philip Flemm et copiae numeri medico-
=rum in Europia, fecerunt. Experimenta horum med
=icorum, nunc considerabo; et multas, ita aperte op-
=positas alteris experimentis, natationem Johannis
Bell me monent, omnes homines plenumque experi-
mentis eorum finem votorum invenire. Thompson
ait, specie sanae experimendo succedere se producendo
expletam contractionem, irritatione acus, et affirmat,

quando plena saturatione communis salis utiter, con-
=tractio nulla sed dilatatio erat. Ait quoque, ut leve stimu
latione fictionis, velocitas sanguinis major fuit. In Italia
quidam medici provocandi notabilem contractionem galva-
=nicis applicationibus arteriis succedebant. Et Flome, irritan-
=do proximum nervum contractionem provocasse dicitur.
Hae magnae incongruitates aliquatenus explicentur, si, ut ex-
:aum experimenta capillaribus et non majoribus vasis facebun-
tur. Bichat affirmat capillaria vasa contractionem peculiarem
dependentem organica structura, possidere. Secundum Craige
hi perminuti tubi, quemdam in natura eorum similarem mus-
=culi habere admittentur, sine necessitate supponendi id mus
=culosum esse. In sententia probabilis fecitur, si, ut tunica
propria arteriosa, in cuiquis vasis sive non est, sive tam mutum
mutatus, ut impossibile est imaginari, eam, experimenta determe-
=nendo gradum aut naturam contractionis arteriosae, posse afficere.

Ante cedentibus rebus, si musculosas proprietates arteriarum admittimus, eam esse musculosam structuram sui generis admittere compellimur. Et, in qualitates ejus et naturales et medicas alienis musculis oppositam. Harvy quando hypothesam ejus proponebat omnem operem cordi tribuebat. Hac re, multae elucubratae computationes, potentiam cordis estimare instituebantur. Borelli eam centum et triginta millia libras faciebant. Keil eam ad quinque uncias reducebat. Apparet mihi methodum a Arnot eam computandi honestissimum esse. Accurata machinatione, ad sex libras uncia cubica actionem cordis fecit. Ventriculus sinister cum distensus, ad decem cubicas uncias internae superficiae continet, igitur vis ejus est circiter sexaginta libras. Cor cleinaps quoque tempore contrahit, vim aequalem sexaginta libris sanguini excercit. Potentia cordis igitur magna est. Magendie putat eam vim satis est sanguinem circulare, et sequente experimento eam probare studebat. Crucalem arteriam et venam exponebat canis, et omnem membrum, e corpore

praeter his duobus vasis se cernebat. Quando arteriam comprehebat et venam aperebat, sanguis egrediebatur donec latera arteriae gradatim claudebantur, tum fluxus cruoris cessabat tamen capillaria vasa plena erant. Haec res doctrinam a Bichat de potentia capillarium vasorum circulando sanguinem, controvenit. Actio cordis sanguinem per valvulas fluere causit. Sanguis sine interruptione fluit, licet vasa pulmonis in ossa pertentur. Nunc si arteriae, musculosa potentia, impulsionem plenam sanguine possunt cernere, certe exponendo arteriam viventis canis possemus eam agnoscere. Sed haec non est. His rebus, credo est mihi, arterias et capillaria vasa, circulando sanguinem eadem adjuvare, operando perpetuam sanguineo fluido, causa visibilendi inherentis in tunicis earum. Mogendie cum, eadem esse primam causam processus admirabilis, et potentia ejus solum praeter resilitandam proprietatem arteriarum et minoribus aliis causis, pulso, et omnes partes corporis, portionem vitalis fluidi recipere.

Nunc sanguinem, in cursu ejus, per corpus considerandus, et causas principes, quae eam dirigunt, notandus. Hanc disputationem concludebo, finem, brevi tempore studendo. Pars physiologiae pulcherrima et mirabilis certe est. Quo plus contemplamur, plus admiramur. Operationes ejus ut invenimus ita, in anatomia sempulsam adaptationem videmus. Cum Hamlet exclamare compellimur "What a piece of workmanship is man" Constructio corporis, miram rem, philosophorum omnium, in omni aetate constituebat. Homo denominetur vivens machina. Adaptatio mirabilis omnium variorum portium, artificem sic perfectum manifestat, ut artificem perfectum admittere compellimur. Operatio corporis animati, quam incomprehensibilis; Aves quae in aerem vivent, animales qui planitias animant, pisces quae in flavio natant, et innumerabiles plantae quae terram variant. Cooperatione varium portium corporis, in sanguinem verteri destinantur. Cespatio brevissimus cordis, mortales consecutionis

producere. Actio ejus igitur constans est. Primus vivere, ultimus
mori. Si causam phenomenon conamur investigare, hypothe-
sis innumeramus, quae probant, actiones vitae, conatus optimos eludere,
et mysteriam constituere, quae caetus solus divellere potest.

An Inaugural Dissertation

On Dysentery

Respectfully Submitted

To the Provost

&

Medical Faculty

For the Degree of Doctor of Medicine

By Jno F. Spalding

of Maryland

To Jas. T. Johnston M. D.

Whose great skill & extensive knowledge in the various departments of Medical science, adds lustre to the profession, and whose integrity of principle & private virtues, are not less distinguished, than his professional attainments. The following dissertation is inscribed as a testimony of the esteem, the gratitude, & respectful attachment of his friend & pupil.

Jno. F. Spalding

Scarce is man ushered into the portals of life before he is seized with disease of some kind or some form of disease and none I believe are we more frequently subject to than the one I am now about to say a few words on viz. Dysentery —— Indeed I am almost tempted to refrain from saying any thing on the subject — when I reflect how often it has been treated of and treated by hands much abler than mine — and more particularly as it is an Inaugural dissertation of mine — and I may go further and say, that I would shrink from the task altogether. — did I not know that it was to be examined by those persons, who are always disposed to overlook all deficiencies — and pity rather than condemn the ignorance of others —— Indeed I would not attempt any thing of the kind, were it not incumbent on me — For feeling myself so entirely unable to say any thing on this or any other subject that could meet the approbation of the Faculty ——

Dysentery is defined by Cullen, "a contagious fever, with frequent mucous or bloody stools, the natural faeces being for the most part retained, with griping and tenesmus" — This definition as far as I can learn from reading and experience, is erroneous — neither Dysentery itself, nor its attendant symptomatic fever is contagious — Cullen himself nor any others who contend for the contagion of Dysentery, has brought one single instance of proof to go to prove the contagion of Dysentery from their own experience — There may be a great many

ases of the disease prevailing at the same time and
the same neighborhood - but this does not go to prove
hat the disease is contagious - It may and I have no
ubt does proceed from one and the same cause, let
t cause be what it may — A patient may be laboring
der some contagious disease, and Dysentery at the same
e — The fever is then of course not contagious - That is,
person who has visited that patient may take the conta
ious disease, but not the Dysentery — The fever may be
ansferred from one patient to one another, but the Dys-
ic symptoms will only occur where the proper causes
e applied — I think this disease may be very use-
lly and practically divided into three species, or rather
ades; not indeed that there is any essential difference
the nature of these three grades, but because they re-
uire a modified treatment - The three grades are the
ute, Sub-acute, and Chronic forms of the disease —
I will now give briefly the symptoms of the acute
orm — It is ushered in with considerable fever which has
enerally a cold stage or chill, anterior to the heat &
ection - The fever sometimes runs high for several
ours, indeed sometimes for a whole day, before there is
y local determination of Dysentery — Clearly shewing in
y opinion that in such cases the whole system is first af-
cted, and the local disease is determined by the acciden
predisposition of some particular organ, such as
e intestines, Liver, Lungs, &c - Hence the same causes
ich in one person will induce Dysentery - may in a second
ce Hepatitis, in a third Enteritis, in a fourth Pneumonia, accord

to the previous weakness of this or that viscus — when the
termination is to the bowels, in this acute form, the dysenteric
symptoms generally ushers themselves in with violence & rapidity
The griping will be severe, the urgency to stool frequent, the tenesmus distressing, all in the course of a
few hours after the attack. Nothing however is evacuated
by all this straining, but mucus tinged or not with blood, according to circumstances, unless the bowels happen to be
previously loaded; in which case there will generally
be fœculent matters passed with the first two or three evacuations — After this you will find more or less blood,
even a few streaks in the mucus, up to the quantities most
alarming — The patient has now no rest by night or by
day — After sitting straining for a long time, he has
scarcely left it and returned to his bed, before a rumbling
sensation, or acute pain is felt in the abdomen, immediately followed by an irresistible inclination to
stool — The patient is convinced that he is ready to evacuate
a vast quantities of burning fæces, each time that he
sits down, and is quite astonished at finding that all
his efforts have only produced a trifling quantity of bloody
mucus, or perhaps pure blood — In this form the urine
is high colored, scanty, and passed occasionally both
with pain & difficulty — The symptoms are all exasperated
at night, and delirium sometimes takes place, when the
pulse is high, which is very generally, and indeed most always
the case — If this violent or acute form of Dysentery, be
not checked before the third day, especially in hot climates
where the disease is principally met with, there will be

eat danger of some disorganization of the intestines, or other
dominal viscera from the effects of inflammation, but more
rticularly of the Intestines - These structural derangements
- abscess, ulceration, or mortification; all of which termina
ns too frequently take place - The formation of abscess
known by the rigors and cold chills, alternated with flush-
, and hectic perspirations which accompany all abscesses of
internal organs - Mortification may be suspected when
patient after great pain & fever, expresses himself suddenly
relieved and thinks that he will soon recover, while at
same time the countenance shrinks, the pulse falls and
comes weak, irregular & intermitting, and the forehead, and
remities are covered with a cold clammy sweat - Ulceration
the Intestines may be the result of the acute form of this
case; and then although the more violent symptoms may sub-
, the local or dysenteric phenomena continue in a chronic
m of great severity & obduracy, which is seldom cured -
s often termination more favorable than the last, is
Chronic Dysentery without ulceration of the Intestines, but
rely with impaired functions of the abdominal viscera in
neral, and of the Intestinal canal in particular -

The subacute variety of Dysentery differs in no essential
int from the preceding forms except in degree - The
pecial symptoms will be so mild, as sometimes to pass
noticed by the Medical attendant; though there will al-
ys be found more or less of febrile movements in the sys-
- if the patient be minutely examined. There may be
preternatural heat on the skin, and the pulse may not
much accelerated, yet it will be easily seen that the
ance of the circulation, and excitability is easily disturbed
several of the functions, especially those of the skin, are

sacred - It will also be observed that towards evening, there
a feverish state of the system, as well as an aggravation
the local symptoms - In this variety of Dysentery, the stools
ll not be near so frequent, as in the acute form, nor
e the tormina & tenesmus be so distressing - The flow of
ood will be nothing to what it is in the other case - -
the number of stools will vary from six to eight, to fif-
en or twenty in the twenty four hours; whereas in the acute
m, there will often be from thirty to forty stools in
e same time - In the acute form there will generally be
in or pressure of the region of the belly, and if the inflam-
ation reach the peritoneal covering of the Intestines there
ll be constant pain in the abdomen, greatly increased of
ures during the tormina & tenesmus at stool - In the sub-
ute form, and after each stool, there is a clear interval of
e, and not much tenderness when pressed on the abdomen -
In both forms of Dysentery, it may be said that the na-
ral faeces are retained, except when purgative medicines
e exhibited, and then they are mixed with mucus, and other mor-
d secretions - Chronic Dysentery is generally a sequel of
e acute or sub-acute forms, but it so frequently comes on
ontaneously, without any acute symptoms from derange
ent of function or structure in the Liver &c in this form
the disease the stools are not so firmly retained as in
ther of the two preceding forms but they are either accom-
nied by a quantity of mucus, or they are passed in a liquid
ate, mixed with morbid intestinal secretions and not possess
g the natural odor of healthy faeces. The stools which
ay in number from three or four, to eight or ten in the
enty four hours, are always preceded by an uneasy sensa-
- & rumbling noise in the tracts of the Intestines, they are then

ssed with some griping pain, and followed by some degree
tenesmus — After this the patient has generally an immunity
from complaint, till the period of the next evacuation —
in such cases, however, and even where there is only some-
what disorder of the digestive organs, an attentive observer
may perceive an unhealthy aspect of countenance in the pa-
ent, indicative of visceral obstruction — Although the
petite may be pretty good, the digestion will be found im-
perfect, evinced not only by the sense of oppression at
e stomach after meals, but by the uneasy sensations
duced in the tracts of Intestines by the passage of faecal
ains along their course — Even in the acute the undigested
rtion of food will be visible frequently — The functional
order of the liver will be easily recognized by the appear-
ce of the stools & urine; the bile will be deficient
in the former, & vitiated; — Under these circumstances the
son may waste in flesh more or less, according to the
gree of violence in the complaint, and the injury which
e Chylo-poietic functions are sustaining — When ulcera-
on or other organic change has taken place in the tracts, or
ere the structure of the Liver has suffered during the
ntinuance of the disease, there the pain, griping, & tenesmus
ll be a great deal worse, the patient will emaciate, and
e excretions from the Intestines contain admixtures of blood
even pus sometimes — These are I think the most depres-
ve cases, and very few certainly ever recover perfectly.
I will now briefly speak of the Causes — and first of the
casional or exciting causes — The occasional or exciting
uses of this disease have been very well understood in all
es, leaving out Contagion, which ought to have no place
the list — These causes are all such as are capable
suddenly suppressing the cutaneous transpiration partic-
rly after that secretion has been in excess — Hence the

disease is most prevalent in the autumnal months, after hot summer, when the nights are beginning to get cold
s, with copious precipitations of dew, while the middle
the days are still as hot as in the midst of summer.
or the very same reasons, we find Dysentery, the constant
ease of tropical and other hot climates, where the per
iratory functions are so generally excessive, that a tripling
mospherical vicissitude checks it completely, and
e result is too commonly a determination to the bowels.
Atmospherical vicissitudes, unaccompanied by moi
e in the air, are not near so prejudicial to the consti
ion, or productive of Dysentery, as when accompanied
dews or rains. Hence the wet seasons in sultry
itudes, are well known to be the seasons of bowel
mplaints (vulgarly speaking). And the vicinity of marshes
woods, from whence there is a great extrication of
por, and miasmata during the day, occasioning correspond
fall of dew at night, has in all climates conduced
terially to the production of this disease. There are
any other causes which produce it. such as, green
nts, ripe fruit eaten to excess, putrid vegetables, spoiled
at, bad bread, and many other things of this kind.
The predisposing causes of this, and most other diseases,
e all such as disturb the general health, & particu
ly the functions of the digestive organs. Hence intempe
ce; improper or too much food; mental anxiety; and in
ort, whatever weakens the tone of the Chylopoietic
cera, renders them predisposed to dysenteric affections.
enever the functions of the skin are suppressed by the ap
lication of wet or cold to the surface, especially after

onsiderable perspiration - So far the Candeg-

I will now say a few words on the pathology of
ysentery, and only a few - For this has been so fruitful
ource of dissention among Medical writers, that it
uld be useless, indeed the height of folly for one to at-
mpt to say any thing much on this subject —
efore a considerable attention to the subject I am
w writing on, and having an opportunity of seeing some
olent cases of this disease, I think I can confidently
ert that two functions appeared to be constantly disor
ed from the beginning, and which either soon pre
eed, or were accompanied by other derangements —
These are the function of the skin, and of the Liv
— Or perspiration & biliary secretion - Let a dysen
ic patient be accurately examined and if these two
nctions, be found in a natural state, at any period
the disease, unless from the effect of Medicine,
when the symptoms are giving way - then I am
ost mistaken - Partial sweats are sometimes seen
the surface, and occasionally an admixture of bile
th these are only transitory, and morbid; for otherwise
regular perspiration is suppressed, and the healthy
retion of bile stopped - These are the two first links of
e morbid change which connects the remote cause
th the ostensible form of the disease: and if this
ain be severed by an early restoration of the two func
n in question the disease will be checked - The next
k in the chain of dysenteric symptoms is the disturbance
the balance of excitability, and of the circulation -
congor seems to seize the secretory vessels of the Liver from
mpathy with those of the skin; in consequence of which a

mous plethora obtains throughout the whole of the
rtal circle and the mucous membrane of the intes-
nes becomes the seat of Inflammation, hence vascular
pescence — The perspiration being now suppressed, a
carious discharge of mucus & acid serum is thrown
on the extremities of the tufted mesenteric vessels
on the internal surface of the intestines, and
senteric symptoms are now unequivocally developed
f the plethora be great blood itself will be poured
rom the mouths of the mesenteric vessels, and this
ill bring on Inflammation & ulceration itself
metimes — If any hardened fæces lurk in the cells
the colon, they will be grasped by the irritable
scular fibres of the Intestines, rings or strictures
ll & augment the torminal griping in the bowels —
a majority of cases where the disease is violent
e natural exertions of the constitution either hasten
e fatal catastrophe, or produce such lesion of struc-
e & function in the Chylopoietic viscera, as induce
a tedious & chronic state of the complaint, which
sometimes quite difficult to manage. The febrile
ymptoms have always appeared to me, to be in just in
oportion to the general disturbance in the balance
the circulation & excitement, but afterwards they may
kept up or modified by the extent of the organic
rangement sustained by the viscera during the general
relish state of the system — The discharge of blood
stools appears to be proportioned to the local con-
stion in the vessels of the portal & mesenteric vessels.
Hence we see that in tropical Climates, where the biliary
rgans are so generally deranged, either in function or

natures, Dysentery is frequently accompanied by great charges of blood from the bowels in consequence of the ect which the Portal circulation meets in the Liver ly from a state of congestion & torpid secretion to suddenly, and with very few premonitory symptoms o a state of suppuration or irrecoverable disorganation sometimes —

Treatment —

In this as in every other disease various theories ve led to various modes of practice — Those who set down Inflammation as the proximate cause of ysentery consider blood-letting as the grand indication — cure, prescribing cathartics, Laxatives, Mercury &c. subordinate agents or merely auxiliaries — And in is I think we will generally succeed — Others thinking at the disease is a fever turned in on the bowels, om suppressed perspiration, have recourse to diaphoics to turn it out again — and they may perhaps metimes succeed in this way — for if they are successful in raising & keeping up a general diaphoresis, the termination is taken off the bowels, the balance of circulation is restored, & recovery of course is the final result — A third class of practitioners, especially ose who have practised in hot climates, finding that the mercurial Salivation very generally produced a cessation of Dysenteric symptoms, became impressed with an opinion that either Mercury had some specific power over the ease or that the disease was connected with derangement in the Liver, which I intend in my opinion is always re or less concerned — Therefore if any of the above thods be set up as a Principal to the exclusion of ers, is attended with inconvenience, or rather with danger, do not maintain, that it is only by a judicious combination

I once had an opportunity of seeing a case of Dysentery where besides the local symptoms of pain, tenesmus & frequent stools there was very high fever; and considerable discharges of blood from the bowels, & fixed pain just below the umbilicus. Finding all these violent symptoms combined — I thought it well to bleed freely — I did, and also applied fomentations to the abdomen externally & emollient clysters internally —

And to my gratification I found my patient recovering rapidly under this plan of treatment —

By the means I adopted in the case just spoken of
had its a tendency, it had a tendency to lessen the ge
l excitement & the local inflammation — In this cli
ate where the disease assumes not that character of
lence & rapidity, which it puts on in the hotter regions
the results, the remedial measures need not be us
with the same degree of violence urgency as in the torri
zone — You may therefore under ordinary circumstances
mbine Calomel, opium, & pulvis antimonialis — Say about
— of calomel ½ gr of opium, & 2 grs of the pulvis antimonia
repeating this about every six hours, ordering the patient to
fine himself to a warm room, or if in the winter time to
to keep himself as quiet & tranquil as possible, and
sist the propensity to stool as much as he can — It is well
put flannel on next the skin, & the lightest food, as rice
el, & sago, tapioca, Jamaica &c — Some practitioners
in with a purgative of neutral salts, as the preliminary
, giving an anodyne afterwards at bed time — but this al
nation of cathartics I am inclined to think, is a very tedious
ful, unsuccessful, & I may say injurious practice —
will I think be occasionally necessary to exhibit a laxa
ve; after which the remedies I have just mentioned, &
know of nothing better than the Oleum ricini, as a laxative
These will carry off any scybala, or hardened fecal ac
mulations, from the cells or recesses of the colon, if
e should be any there, though I am inclined to think
that is not so often the case, as is generally thought
he principal use of laxatives, in my opinion is to facil
te the expulsion of the morbid secretions from the
ce, & mucous membrane of the Intestinal canal — The
by use of a laxative should never interrupt the progress or

the exhibition of the principal remedies, since I consid
it only as an auxiliary, though by many the purgative plan
held as the paramount remedial measure in Dysentery.
In the course of two three, or four days, you will find in
majority of cases that there is a mitigation of the
e violent symptoms - The skin will feel soft & moist,
tormina & tenesmus be greatly abated if not removed
e stools will now appear feculent, impregnated with ma
ral looking bile, less mixed with mucus or blood, more ca
g passed & having none of the common foecal smell.
In short the patient will now make little or no comp-
int - There is now very little to do but guard the pa
ent against cold & imprudence in respect to food - The
hole of the Dysenteric symptoms will vanish, the pa
ent will have a rapid convalescence -

Some recommend salivation as very essential, but
my opinion it is not necessary - unless the disease shou
ve been of some standing prior to a physician being
alled in, or in other words if it has not been proper
reated, or if the Liver is much in fault which is
metimes the case - under such circumstances I think
would be prudent to keep up a gentle mercurial
ction in the system for a fortnight or three weeks.
ter the principal Dysenteric symptoms have subsided, in
der that the biliary secretion may be completely
ored to a healthy state - I will take this opportu
ity of expressing myself with respect to mercury, or the
ercurial sore mouth - There is a vulgar antipathy to
ercurial sore mouth & an illiberal clamor raised
a certain party in the profession, as respects this medi
- The credit I think which one will obtain by a prom
cessful practice, will eventually overcome any temporary inco

tion which the exhibitions of

ion which the exhibition of mercury may produce in a
ment; and the dread of this medicine will disarm any
of a powerful weapon in the cure of diseases; a
apon which others will employ if you do not; and thus
rive you of many a patient, & perhaps your reputa
on in some degree - I therefore never shall hesitate
employ it if I think it at all necessary —
In laying down the above simple plan of treatment
would by no means wish to be understood, that I should
ways bind myself to its universal adoption —
Dysentery is a disease which though more steady &
form in its character than almost any other, is yet
casionally so modified by climate, idiosyncrasy,
various circumstances, that it will require all the
ht which experience has thrown on it, and all
e remedies which authors have recommended
r it, in bad cases, in unhealthy climates, & during
partial or epidemic — There are epidemic dysen
ies, as well as epidemic fevers, epidemic catarrhs,
epidemic measles; and each epidemic generally
quires some modification of treatment peculiar
itself, which must be discovered by the practitioner
imself, during the prevalence of the disease — I think
this disease is carefully examined under all circum
ances you will find its pathology fundamentally
e same; though some of its external features vary, re
uiring a corresponding variety of treatment — Thus in
e epidemic, or in one individual, the inflammatory
ymptoms will so far predominate, that bleeding must be car

ied to a great extent; & indeed in such cases even
ler consideration must give way for a time: and all
orts must be concentrated on the means of guarding the
estined from disorganization by the process of Explan
tion — I have now I hope satisfactorily conclu
d my Inaugural dissertation, and will now close,
ling that the Faculty will look on it as the first
y attempt of the kind — & pity rather than Condemn
defects they may see in it — And I hope that
ey will look over all defects with an indulgent
e —

On the Use & abuse of Mercury

The subject of the following pages is one of so common a nature, and one so ably treated by many who stand at the head of their profession, that I hesitate to present my views on the subject to the examination of the faculty. I am induced, however, to do so, by the Consideration, that no article of the materia medica is so frequently exhibited, and that no other article embraces a wider range of usefulness, nor is so liable to empirical and improper administration. I shall therefore endeavour to point out some of the principal states of disease, in which the preparations of mercury may be usefully employed and Contrast therewith those, in which their administration may be considered as doubtful or injurious. In so doing, I shall utter no dogma. I shall only give those opinions which are grounded not on my own experience, but on that of others, whose judgement I am bound to respect, and whose precepts, I hope, I shall never forget, until experience teaches

me that they are erroneous.

I shall commence with Considering the propriety of administering the preparations of mercury in the common bilious remitting and intermitting fevers of our Country. So common indeed, in the Southern part of it, where I have hitherto lived, and expect hereafter to reside and practice, that hardly any other form of disease is presented to the physician's care. Without the preparations of mercury, and Calomel particularly, the Physician would frequently be at a loss, in what manner to treat the disease. In all its varieties, from the simple quotidian, to its most violent and malignant form, our remedy, in some shape or other is equally applicable. But some precaution is necessary preparatory to its free use. Where there is much arterial excitement, the lancet, or other directly depleting remedy should precede its administration. Calomel alone, or combined with other purgatives may then be given to evacuate the bowels, and stimulate the liver, which

is almost always in a torpid state, and if the disease continue obstinate, may be given in small and repeated doses, with the view of subverting the disease by creating a new action in the system. I consider it unnecessary to be more particular on this subject, as almost every person, however ignorant, must be acquainted with the use of our remedy in these forms of disease.

Cholera Infantum is a disease peculiar to our own country, and never described by any European writer. It appears principally in large cities, during a warm summer, after a cold winter, and in the country also occasionally, if a large extent of surface surrounding the patients residence, be exposed to the immediate action of the sun's rays. Like other diseases produced by heat, the fever is generally continued, and rarely assumes the remittent or intermittent type. It is however more inflammatory, when this does occur, but no essential difference of treatment is required. Experience, and examinations after death have proven that the disease consists in a derangement

of the function of the liver, occasioned by heat, producing a Congestion of the whole portal Circle. Children between the ages of six and 24 months, who are weaned too early, and exposed to the heat of the sun, and indulged with acid unripe fruits, or any undigestible food, are most liable to the disease; while those who are suckled until they pap their second summer, and confined almost entirely to their mothers' milk, and proper attention paid to their clothing, and keeping them from exposure, will be almost certain to escape it. The symptoms of Cholera Infantum resemble somewhat those of dysentery or diarrhoea, but in its more violent form, there is great irritability of stomach which it will be necessary to endeavour to alleviate. For this purpose Dr. Dewees recommends an injection of a gill of warm water, in which are dissolved a few teaspoonsful of Common Salt, repeating it until the stomach is quieted, which is almost always the Consequence. but our chief reliance in all the forms of this disease, is on Calomel, administered not as a Cathartic, but as an alterative, in doses of a

quarter, or a half grain three times a day, aurording to the age of the patient. It may be Conveniently given by rubbing it up with a little loaf sugar, and throwing it dry into the patients mouth, and its use is to be continued, until all the distresing symptoms begin to be alleviated. Many practitioners object to the employment of Calomel in all the diseases of Children on account of the danger of exciting a salivation and perhaps, inflammation and Consequent slonghing. but such persons will find, or experience, that they cannot salivate a child in this disease, and that, in fact, in Children, before their teeth have appeared, and in old persons who have lost them, it is impossible to produce this much dreaded result

Like the last, dysentery is a disease most frequently produced by heat. It sometimes however appears, accompanied by symptoms of a bilious Character and is always more inflammatory, requiring nearly the same treatment as Common bilious remitting fever. It sometimes appears too in winter, and may

evidently be traced to a disordered state of the liver - to effect a cure, we must remove the cause that produced the disease, and this can only be effected by rest, abstinence, and a course of mercury - To an adult, half a grain of Calomel three times a day until it produces the desired effect may be given, and at the same time, such other palliative remedies as the urgency of the symptoms may appear to demand - We also sometimes, have an autumnal remitting diarrhoea, requiring precisely, the same mode of treatment for its cure

In all obstinate long Continued Coughs the result of any Complaint affecting the lungs or their appendages, where there is neither malconformation, nor a Scrofulous diathesis, mercury will prove a safe and efficient remedy - In this state, after proper evacuations, the usual practice is to administer the stimulating expectorants and diaphoretics, such as Polygala Seneka Actaa racimosa, Lobelia inflata &c - all these however may fail, and a dry troublesome

cough remain, which will readily yield to mercury if carried to the extent of exciting a slight salivation.

Hepatitis is a disease much more common in our own Country, than in any part of Europe, and occurs most frequently, as we advance farther South. Its causes may be the same, with those which produce inflammation generally, but "a very strong predisposition to it" observes Dr. Gregory "is given by hot climates, and a long course of full living with indulgence in spirituous liquors. Heat appears to have some peculiar, and inexplicable influence upon the liver" and to this principle and the agency of marsh miasma, must be ascribed the more frequent occurrence of the disease in warm than in Cold or temperate Climates. When characterised by acute pain in the right hypochondrium, aggravated by pressure, tense hard and full pulse, and other symptoms of an acute nature, our remedies must be the free use of the lancet and purging with the neutral

salts continued steadily till all these symptoms are reduced - In our Country, where the extremes of heat and cold, are much greater than in Europe, inflammation runs higher, and almost all our diseases are of a type, to which, European practitioners are strangers, and the antiphlogistic treatment therefore must be carried to an extent, which they never recommend. In this state of the disease, mercury is inadmissible; it but increases inflammation without inducing ptyalism, and renders more bleeding and purging necessary. But in that chronic form of the disease which follows, or is induced by the slow operation of the same causes which give rise to an acute attack, and is characterised by a dull pain and sense of weight in the region of the liver, extending to the shoulder, and symptoms of dyspepsia and general distress, our principal reliance is on the due exhibition of mercury, aided by an antiphlogistic regimen, mild aperients, and blisters over the region of the liver - The blue pill given regularly

until it produces the slightest manifestation of its influence, without inducing ptyalism, will generally be found sufficient to arrest the disease, if there be not already some disorganization of the part principally affected -

In Cynanche trachealis or Croup, the judicious employment of mercury will be found to be of the utmost advantage - Discarding altogether the old theory of its being a spasmodic disease, I shall consider it as purely an inflammatory one running its course quickly, and requiring, to save life, or at least, to prevent a slow and painful recovery, the most energetic antiphlogistic treatment. Venesection therefore will naturally be resorted to, as one of the first and most efficient means of combatting the disease, and ought certainly to be employed early and in large quantity; but unfortunately, neither general nor local bleeding will succeed in unloading the vessels of the parts affected such is their number and minuteness, unless carried

to an extent that might prove fatal to young children. Emetics are also employed, but the insensibility of the stomach to the action of medicine is such, that the usual emetics, in the most powerful doses, frequently fail of producing their effect. In this case, we have a most powerful adjuvant in Calomel. The union of this article with tartar emetic, in the proportion of 30 grs of the former to 10 grs of the latter, made into an emulsion with gum arabic, and dissolved in four ounces of water, gives us a Compound, the virtues of which, both as an emetic and Cathartic are superior to either separate. The dose of this Compound may be from a tea to a table spoonful, according to the age and Condition of the patient, and ought to be given every 15 minutes until it operates. After the operation of this remedy as an emetic, or if it should fail to operate as such, and the symptoms continue urgent, Calomel alone and in doses, which, to many, would appear unwarrantable, ought to be administered. It has been already stated, that this disease runs its

course most rapidly, and in fact the short space of from 12 to 24 hours, after alarming symptoms begin to appear usually determine the patient's fate for life or death; for the latter, in a large majority of cases, unless prompt and efficient medical aid be afforded. What more forcibly than the experience of this fact, can admonish us, that this is no season for trifling! We ought to give from 5 to 10 grs every two hours, according to the urgency of the case, until a change for the better is perceived, and if this mode of treatment be not attended with an amelioration of the symptoms, we still have a resource left in another preparation of mercury, the bichloride, or corrosive sublimate— When other emetics fail of producing their effect, and difficulty of breathing is excessive, threatening suffocation and shewing that the progress of the formation of membrane in the trachea, will soon put a period to the patient's sufferings, this medicine may be given as a dernier resort, and according to the statement that has been given of its effects, with almost a certain prospect of affording relief - I would not however

recommend its adoption, to the exclusion of other remedies, and would in no case administer it except as already stated, in the character of a dernier alternative - Prepared in the proportion of one grain to the ounce of distilled water, a tea spoonful may be given every 15 minutes, until it operates, and afterwards, if there be any pain in the stomach, a little toddy, or a few drops of laudanum may be given to relieve it.

Paralysis of whatever part of the body is most frequently a symptom or one of the sequels of improperly treated apoplexy. It was formerly, and is in a great measure, to the present day the practice to treat all varieties of paley, as if they were purely diseases of debility, without any reference whatever to their true pathology, and with this view, stimulants both external and internal were profusely and indiscriminately employed without knowing or reflecting perhaps, that their operation must be, to increase the Congestion, and compression on the origins of the nerves, on which the disease depends. A variety of paley may sometimes occur from cold

or some other exciting cause, entirely independent of any affection of the brain, without any violent reaction - a mere deprivation of muscular power without arterial excitement, in which stimulants and stimulating frictions will alone effect a cure; but where the brain is in any way concerned, as is most frequently the case, depletion by the lancet is the remedy chiefly to be depended on. When this has been carried to as great an extent, as may be considered prudent, and paralytic symptoms still continue, a salivation will be found to afford efficient relief. Mercury is the only stimulant that can be exhibited with advantage, for while it subdues inflammatory action and thereby relieves the patient by lessening congestion and compression it stimulates the system at the same time.

The use of mercury in the treatment of small pox, must not be forgotten and its utility, whether the disease has been communicated by inoculation or acquired, as it is termed, in the natural way, will be acknowledged by all who have witnessed its efficacy. When it is deemed expedient to secure a person

against the usual mode of acquiring the disease, by inoculation, it is customary to give minute doses of Calomel every night, or every other night for 8 or ten days, before we insert the poison. This is no new practice, and although it is quite unnecessary that the medicine be pushed to the extent of exciting any specific action, it has been found, combined with a low diet, invariably to insure to the patient, if he be a fit subject for inoculation, a moderate Crop of pustules and a speedy recovery. But it is in the treatment of small pox acquired in the natural way, by a person unprepared for its reception, that I wish especially to press its use. As soon as the emption appears, I would, after previous evacuation of the bowels, commence with the use of Calomel in divided doses, and would continue to administer it; even if the disease appeared in its confluent form, and under a type, which to many, would appear to require the use of stimulants. If it occasion diarrhea, which it is apt to do, on its first administration, it will be necessary to combine it with opium, and continue its use, until the disease appears to yield, or the patients mouth

become sore. In the latter event, his recovery is certain. I do not mean to assert that slight cases may not recover under quite a different mode of treatment, or that cases may not occur of a type too low to admit of the use of mercury, and requiring the administration of bark wine ammonia &c to sustain the sinking powers of life. I merely wish to say that this mode of practice, with the assistance of cool air, low regimen, and diluting drinks, will be found, in a vast majority of cases, to be much the most successful.

Fortunately for mankind, hydrophobia, or more properly speaking, Canine madness is a disease of rare occurrence, one which may not be seen during a long life and an extensive practice, but from its generally fatal termination, when it does occur, I deem it necessary to mention the course I should pursue, if a case of the kind should ever come under my notice. The horror inspired by the bite of a dog supposed to be mad, will almost invariably drive the unfortunate person to seek the means of preventing, rather than wait till it becomes necessary to use the means of

curing the disease - A variety of remedies have been recommended for this purpose, excision of the bitten part, the actual Cautery &c, but the best local means, I think, is, to inject as deep into the wound as the fang has penetrated, a strong solution of the Caustic alkali, to produce a sloughing of all the neighbouring soft parts, but my principal dependence would be, on the effects of mercury administered immediately and continued until ptyalism be produced: This course has in every instance in which I have heard of its being tried, effectually prevented the disease - If the means of prevention have not been resorted to, and the disease comes on, I would first bleed the patient freely and repeatedly, and Commence the use of mercury in the same way - The virus of the mad dog, like all other poisons not sufficiently virulent to destroy life at once, is followed by inflammation and fever, and this can only be reduced by the free use of the lancet - I am not aware that any one preparation of mercury is preferable to another, but the urgency of the symptoms is usually such, that the promptest mode of inducing the effects of mercury on the system, is probably the best, and with

this view, I should exhibit the salivating emetic prepared by adding one grain of Corrosive Sublimate to one ounce of water, and giving a teaspoonful every 15 minutes, until it operates. This is always followed by free salivation

In the treatment of Scrofula, or of diseases Connected with a scrofulous diathesis, mercury must be exhibited with the utmost caution. If given to the extent of exciting ptyalism, it will generally be attended with mischief, aggravating the disease, and when locally developed, increasing irritation, and hastening the ulcerative process, which, it ought to be our business, if possible, to prevent. These local injuries are always unseemly to the eye, and injurious to the Constitution, and the effect of mercury on them will be, to increase their extent and protract their cure. But inseparably Connected with the disease, there is, generally, disorder of the digestive organs, a torpor of the liver, which can be removed only by mercurial purges, and these ought to be combined with rhubarb, or some other active article to hurry them through the bowels. It may be necessary also to administer mercury as a deobstruent, and for

this purpose, the blue pill, in union with Ipecacuanha in such doses, as will gently stimulate the liver and determine to the surface, without affecting the gums, will, be found the best prescription. Administered in this way, no article of the materia medica will do so much good in the treatment of scrofula, while on the other hand, no medicine will be so detrimental, if given in a hurried or improper manner, and the physician ought always to bear in mind, that in this, more than in any other disease perhaps, it will require his nicest discrimination to determine, when and to what extent, the preparations of mercury are to be given.

In all the diseases incidental to a state of pregnancy it was once the opinion, that mercury could not be exhibited, without the risk of producing abortion. Such an opinion however is not entertained at the present day. No article of the materia medica, of which we have any knowledge, possesses the power of acting directly and specifically upon the uterus, but must influence that organ by the irritation produced on the intestines and other neighbouring viscera. When it becomes necessary

therefore, to unload the bowels, mercurial purges must be quite as safe, as the more irritating and drastic articles of the class and much more effectual in removing the cause which requires their exhibition - Mercury may also be given to pregnant women with equal safety to excite ptyalism in Syphilis and other diseases requiring its exhibition to that extent, and indeed, the only means, within our power, whereby their lives may be saved, when exposed to the infection of the small pox, is to prepare their systems for its reception, by putting them under the influence of mercury. It will always be well however to do so in the slightest manner imaginable, a mere fetor of the breath, or swelling or soreness of the gums will sufficiently indicate to us, when enough of the remedy has been taken &

In Congenital Syphilis, our only resource is the use of mercury - If any article of the materia medica deserve the character of a specific, it is mercury for the cure of Syphilis - It never fails to eradicate the disease, and, if exhibited with due care, leaves no evil consequence behind it - Children the offspring of Syphilitic parents are born most frequently a month or two before their full time and usually survive but a few days - The skin exhibits

a singular kind of eruption, which once seen, can hardly ever be forgotten, and the toe and finger nails are frequently defective, sometimes altogether wanting - It is not my intention to enter into any disquisition as to the manner in which the disease is communicated to the fatus in utero, - but it is worthy of remark, that it may exist in the system of either parent, without being communicated to the other and without their being conscious of, or experiencing any ill effects from it, and still each succeeding child will be born with the disease developed in its fiercest form - No matter how the disease is communicated, the treatment is the same - Small doses of Calomel 1/6th of a grain, or 1/2 gr blue pill two or three times a day must be given and continued until the symptoms disappear - I have never seen but one Case of infantile Syphilis, and then a perfect cure was effected by the use of a solution of the bichloride of mercury and muriate of ammonia - Friction with mercurial ointment will not effect our purpose - in adults, it is one of our most effectual modes of mercurializing the system, but the absorbents of a child's skin will not take it up - If the parents

of such offspring ever wish to have living healthy issue, they must one or both submit to a full mercurial course.

I have thus taken a brief and I fear, imperfect view of some of the principal diseases in which the preparations of mercury may be used with advantage That they are almost universally applicable, in some shape or other, every person at all acquainted with their virtues will admit, but this very fact renders them dangerous weapons in the hands of the careless or the ignorant Calomel, for instance the most useful and the most universally used, of all the mercurial preparations is frequently administered in states of the system, which call loudly for the use of the lancet, and other directly depleting remedies. I have seen the most deplorable results ensue from this practice. A man in the prime of life and of a vigorous constitution was seized with the common remitting bilious fever. His bowels were evacuated but he was not bled, and as the disease continued obstinate, Calomel was exhibited in small and repeated doses for the purpose of inducing salivation. In a few days there occurred a violent inflammation and

enlargement of one of the parotid glands, without any increase of the salivary discharge or soreness of the gums. The tumour soon increased to a very large size and began to assume the appearance of incipient gangrene when the patient died Comatose. In this case I attributed the fatal result entirely to the want of bleeding. If he had been bled sufficiently in the commencement of his disease, the necessity of administering the Calomel might have been entirely obviated, or if deemed essential to put him under the influence of mercury its specific effect would have been kindly induced, and the patient probably saved to his family and friends. Another case came under my notice of the abuse of mercury, which terminated more favourably to be sure, but at a fearful risk to the young patient. A boy belonging to one of our sloops of war on the West India station was taken sick ashore and treated in the usual way with mercurial purges &c. without sufficient venesection. After a long confinement he recovered strength enough to resume his duties, but continued to complain for some time after his return on board, when he was seized with a violent

fit of Coughing, which ended, in the expectoration from his lungs of an immense quantity of bloody purulent matter The Case was a plain one - He had never had any symptoms of thoracic disease, but inflammation of the liver was the Consequence of his previous illness. An abscess formed, the walls of which became adherent to the diaphragm, and burst into the Cavity of the thorax from whence it was evacuated and the patient soon recovered - In this Case youth and a good Constitution Carried the patient through a trial under which thousands might have sunk, and from which, free and timely evacuation by the lancet would probably have saved him.

There are some persons who, from idiosyncracy or some strange peculiarity of Constitution Cannot take mercury in any shape or in any appreciable quantity without being violently affected by it. A Case of this kind Came under my notice occurring twice in the same individual - On the first occasion he took a dose of Calomel, and about 12 months afterwards, a dose of Calomel and Jalap, and on both occasions was seized on the day following with profuse salivation

his whole face, tongue, throat and neck were prodigiously inflamed and enlarged and remained so for two or three weeks, during which time, he could swallow nothing but liquids, and could not articulate at all, but had to make known his wants to his attendants through the medium of a pencil and slate which he kept by him for that purpose. To such persons, no preparation of the metal ought to be given, unless imperiously required, and then with the utmost caution.

The consideration of this subject might be spun out to an almost indefinite length, but I fear I have already trespassed on the patience of those whose duty it will be to examine these pages. I hope however that I have advanced enough to satisfy the faculty that I shall enter on the duties of the profession of which I seek to become a member, with a due sense of the heavy responsibility attached to it, and with a proper view of the pathology of those diseases which it may be my lot to encounter

An

Inaugural Dissertation

On the

Peripneumony or Catarhal Fever

of

Children.

Quaeque ipse miserima vidi.

(Virg.)

By

Charles H. Matthews

Maryland

To
Doct. Francis Neale

This Essay is offered as a testimony of the respect, which I entertain for his good sense, and sound judgment, and practical skill as a Physician: and as an evidence of the grateful feelings, which I cherish for his many kindnesses to me, whilst prosecuting my Medical Studies under his immediate directions.

Chas. H. Matthews.

On Peripneumony of Children

Scarce has man been ushered through the portal of life, Ere he is Environed by disease in a variety of forms and Complications. So that it would seem that the inheritance of corporal afflictions is no less the lot of man, than original spiritual imperfections. Whether disease have been entailed upon us as an earthly check to disobedience of the Divine requisitions; or as providential harbingers of that period of dissolution which is veiled to mortal knowledge: Or whether it be the natural result of the Corruptibility of the flesh, uninfluenced by the agency of mortal causes: It is still the appropiate field for the exercise of charity: and the rightful subject of the care of that Profession which from its every nature Entitles it to the appellation of the most benevolent of the Sciences.

Among the variety of those maladies that conspire to disinherit us not only of the Common

enjoyments of life but even of existence itself; there is none more insidious in its attack, more rapid in its progress, or more generally fatal in its event, than the Pulmonic many of its forms. Under the guise of a simple Cold, it assails organs intimately concerned in the functions of life. The interruption of which is attended with the greatest distress; and whose structures are easily involved in irrevocable mischief. There is scarcely an organ of the Thorax that escapes its extensive ravages. Yet notwithstanding the importance of the parts implicated, the extent of its incursions, and its mortality. This disease has not until very lately "attracted the attention or engaged the industry" of medical writers. A

Such then being its awful character, and such too the inattention with which it has been regarded by the Profession that it seems a worthy subject for an Inaugural discourse. But those very reasons which enforce it upon our particular attention, increase the difficulties which we have to encounter in its discussion: deny the lights that should emanate from the Experience of others; and as our own must necessarily be limited it is freely acknowledged that we may have fallen into error in many places; and that much more might be said than our own observations justify. This we hope will be deemed a sufficient apology for the inaccuracies that may be discovered in the following

pages. — — — — — — —

A.

The first regular account of this disease is
from the pen of Dr Cumming of Dublin.
Trans actions of Dublin Coll
Vol V.

Symptoms

To be more perspicuous, it will be necessary to divide the symptoms into such as indicate its first stage, and which evidently arise from inflamation; and those which denote its second: which are the consequences of copious effusion into the Bronchiæ and Air cells. The incipient stage of the Peripneumony of children is marked by frequent, harassing, Cough, which is extremely distressing; difficulty and frequently shortness of breathing; with a peculiar anxious expression of Countenance, fectfulness, and dryness of the Nares; much thirst; & white tongue, which is sometimes very red at its apex and near its middle, but furred towards its root. The Pulse is frequent, quick and not unfrequently full and hard. Bowels costive Skin dry, sometimes flushing of the cheeks. In one instance I observed a patch of erythematous inflamation on the shoulders and back. This State of things is, in the general, of short Continuance. The disease quickly merges to its second stage, when a more formidable train of symptoms make their appearance.

The pulse continues frequent, yet soon becomes small, and compressible. The breathing becomes more difficult ~~Continues~~ continues short, slight-rattling is now observed in the Trachia (the Mucous of the Trachia) shewing that Effusion has commenced. The child is scarcely able to clear its throat of the effused

Mucous matter — At length the Countenance becomes pale. The ed parts of the lips livid. Breathing can scarcely be performed — The rattling becomes distinct. The whole Trachea is filled. The mucous matter issues from the mouth and nose in immense Quantities — The Child sometimes appears to be in a State of inexpressible distress. At others it is altogether unconscious. Death soon and certainly closes this scene of misery and distress —

Causes

It seems that no particular habit of body is more susceptible of this affection, than another. No State of infantile health appears to be exempt from it. The delicate and hardy are equally subject with those of firm constitutions and full habits to the inroads of this disease.

In common with other inflammatory diseases, its chief Causes are Cold and Variable States of atmospheric temperature. These, operating at that period of life, at which the System is naturally in a Condition of high excitability and therefore keenly susceptible of the impressions of External agents, engender disease in its most aggravated forms —

Prognosis

With respect to the Prognosis it is favourable or unfavourable according to the period at which we see the patient. If called in at an early stage of the complaint, whilst inflammatory action prevails and before effusion to any extent has taken place; and appropriate remedies directed we have every reason to calculate upon a favourable issue. But if effusion has already commenced, the time for the successful exercise of professional aid is passed. The condition of our patient is truly unfortunate. Medicine is now of little avail. The patience of the Physician may soothe the distresses of the parent. but it cannot arrest the march of this disease to a fatal termination — And if urged by the solicitations of friends, or prompted by the anxieties of fond and affectionate parents he exerts his professional skill; he will experimentally shew the ineffacacy of medicine and have another conclusive but mournful proof of the impotency of medical art. It is also to be observed that effusion and consequently death (for in this disease they are almost synonimous terms) occurs at an earlier period of the attack in the constitutionally delicate, & than in those who are remarkable for the vigour of their health and their natural strength of constitution. —

21.

In one case, a child of marasmatic habit lie
and weak, effusion came on in a few hours
after the commencement of the attack. It de
within twelve hours after it was first affecte
that effusion seems not to be proportionable
to the excess of inflammatory symptoms,
appears rather owing to debility of recupe
the energy of the arterial system. Vide Tabridge.

Diagnosis

The diseases with which the Catarrhal fever of Infants is most liable to be confounded, are the Glynanche Laryngea and simple Cold. From the Croup it is to be distinguished by the absence of the peculiar hissing sound in inspiration which is the chief characteristic of the former affection. The Croup is sudden in its invasion, and seldom anticipated by any premonitory signs: and according to Cullen usually affects children at the Breast. Where as I have seen the infant of six weeks fall a sacrifice to most unequivocally marked cases of Peripneumony. And though its advances are rapid and yet in almost every instance forewarned of its approach by certain precursory symptoms.

These with a retrospect of the above mentioned symptoms are the criteria for discrimination. The first inceptive plate personates with great accuracy a simple cold, and though it be a matter of serious importance it is often one of extreme difficulty to distinguish the two affections; for by its deceitful resemblances to the Catarrhal complaint the veil to its dreadful menaces is not removed till a series of circumstances present themselves bearing about so clearly to the

woeful Error into which either inexperience or a want of sufficient Caution may have led us. May its real nature & Seu Etudes the most Care-
ful obs. I therefore attempt its diagnosis with
difficulty.

Whilst the disease of which I am treating is more confined to the Thorax, it is rarely attended with marks of Sthenic inflammation - There is no difficulty of breathing through the nose: no distillation from the nares, and no fulness nor heaviness of the head; the chief marks of simple catarrh so far as I have been able to discover. There is more difficulty of breathing; at its very beginning it is attended with hesitating Cough which does not arise in "Common Colds" Till after the appearance of the symptoms which originate in fulness of the vessels of the membranes of the nose and adjacent cavities. Whilst the Descriptive Synonymy of Children is strictly a disease of the Thorax affecting its organs and their membranous investments. The simple Catarrh is confined to the mucous lining of the nares, the fauces and a small extent of the Trachea. Whilst the former is the inheritance of Infancy the latter is common to every period of life. - - -

Appearances on Dissection

The pathology of this disease will be best illustrated by recording those diseased appearances which I had an opportunity of discovering upon post mortem Examinations.

Case 1

C. J aged about two Y.s 6 months a Strong and healthy Child was attacked Janr. 6th with Symptoms of Pneumonia Infantum. She was treated with the Common Antiphlogistic means, with the exception of Venesection A. On the 16th of the month She died — Autopsy 18 hours after death. Cold weather very severely Cold. On opening into the Cavity of the Thorax, the upper Lobes of the Lungs were observed to be slightly adherent to the Surface of the Pericardium. The Lobuli of the right side were closely connected by Strings of adhesion which were extremely vascular. Numerous bands were seen stretching from almost every part of the Convex Surface of the right Lung to the Pleural lining of the Ribs, binding the Pleura Pulmonalis to the Pleura Costalis. On the lower and Convex Surface of the same Lung about the place of the fifth & sixth true Ribs lying upon and apparently secreted by the adjoining Surfaces of each membrane there was a patch of spurious purulent matter

A. A consideration of this case, with a better knowledge of the disease, the result of a more perfect instruction & experience causes me to deplore sincerely my neglect of a report to the above expedient. But the disease appeared under such a deceitful character, that I mistook its real nature and miscalculated it's evil till too late. The pulse by which I was chiefly misled: was quick, frequent, irritable and little tense, yielding to compression a character of pulse which I have since learned is dependent upon that degree of inflammation which if not soon checked, seldom fails to terminate in adhesions.

The matter being rubbed off the membrane was highly vascular without the slightest discernable ulceration. Inflamatory patches were to be seen in parts of either Lung. The right was slightly hepatized the left very much so. In the Bronchia there was much muco purulent effusion with marks of Extensive previous inflamation in its mucous lining. On the outer side of the Trachea above the Thyroid gland and between the edges of the Sternothyroid muscles of either side there was a collection of matter of small Extent and immediately below the same Gland on the right side of the Trachea just above its bifurcation was a like formation of pus. There was no inflamation of the integuments of those parts. The abdominal viscera presented nothing unusual except that the liver was somewhat Enlarged and the gall bladder distended of a light appearance.

Case 3rd

A Dutch child between 6 and 8 weeks of age, of previous good health was attacked with symptoms of Catarrh, which being referred to a common cold (by its attendants) it had taking nothing but Nutriments and some other palliatives for several days. When medical attention was directed to it, Effusion to an Extensive degree had taken place. It was treated with the

B. This is a beautiful Illustration of the fo
logical remark Long since made by Mr Hu
and sufficiently Established by his own obser
tions; and those of De Haen Quesnay Leyro
and Morgagni; (viz: That secreting Surfa
produce pus without any dissolution o
parts. Recollecting this fact. My Brothe
W. Randolph and myself fellow Students
took particular notice of the part.
We cleared the matter away & having
Examined it attentively, could not perceive
the slightest mark of ulceration. The Surface
beneath was very red, which we tubed
over with our fingers (a mode of distingu
ing) inflammed Surfaces from the mere
Effusion of bloody matter. which we ver
Lately by the late learned and distingu
ed Professor of Anatomy in the Baltim
School; without being able to remove it
colour. So that I think there can be no
doubt that in this subject there was a
instance of a serous membrane in a State
of high Vascular action secreting Gumm

remedies proper to that stage. Autopsy 36 hours after death. Weather exceedingly Cold —
The whole Extent of the Trachea even to its ramifications into the lungs developed traces of a high state of previous inflammatory action. The Trachea and Bronchia were filled with Effusion. Each Lung both on their superior and inferior surfaces presented various inflamed spots. The liver was in a state of dangerous congestion. The Stomach and Bowels rather hypaniatic.

Case 3rd
— " —

When the subject of the following report was from two to three months old, it was attacked with symptoms of Croup of which it had been almost entirely relieved. It had a pale and delicate & marasmatic habit. Almost two days or a fortnight subsequent to the attack of Croup it was seized with symptoms of Peripneumony. The disease commenced between three and four O. Clock P.M. I saw it about eight in the second evening. Extensive Effusion had already filled the Trachea. It died at three the next morning. Autopsy 24 hours after death, Weather Cold. — —
The Trachea and Bronchia were filled with Mucous Effusion. The vessels of its inner coat red and minutely injected. The Lungs were inflamed in different parts of their surfaces. The liver and Spleen much Enlarged. The mesentine Glands were likewise much Enlarged.

Pus. What precise condition of body may lead to this Event. or at what period of the disease it occurred, are questions about which I shall not here attempt to speculate. I shall likewise leave the reflection that may be suggested by a consideration of those accumulations of matter upon the Neck and within the Trachea, to those more used to anatomical researches, and more skilled in pathological disquisitions.

Case 4th
"

A. N. as well as I could learn was from Eight to twelve months of age. I had no personal knowledge of him previous to his death. I understood he had laboured under a common case of Consumption. On Examination after death this left Lung was Cascular and inflamed. Its border presented the appearance of purulent fringe. The Pleura were inflamed in many parts. There was hydrothadic Effusion upon the Surfaces of the Lungs and Pleura In this instance there were four Intussusceptions in the course of the intestinal track.

As a further illustration of this dreadful disease I think it will not be out of place to append to the ~~to the~~ Reports of the above Cases the abstract of the minute and accurate post Mortem observations of Dr Cumming of Dublin taken from the August Number of 1828 of the American Journal of the medical Sciences,

"In a very few instances traces of inflammation were found in the Pleura as Effusions of Lymph and Serum, Membranous adhesions &c. In two instances the Lungs were thickly studded with small grey tubercles & in another the Exterior part of either Lung Contained a number of tubercles, several of which were in a State of Suppuration. In the five cases in which the Lungs were tuberculated, a general tubercular deathisis seems

to have pervaded the System as was indicated by the Existence of Tubercles in the Peritoneum and Pleura. In one of those cases the Spleen was as thickly studded with Tubercles as the Lungs, and in both the Mesentine and Bronchial Glands were Enlarged. The most frequent and Constant morbid Change met with, is an increase in the Solidity of the Lung (varying) in degree from that of the slightest Sanguineous Congestion to complete Hepatization (the second degree of Inflamation of the Lung as described by Laennec) The inferior and posterior portion is in general principally affected, and the upper portion is often healthy or only a little Congested When the inferior portion is Completely Hepatized. When Sanguineous Congestion prevails it is generally combined with more or less of Serous effusion into the interlobular of the Lung: but when the Lung is Hepatized its Section appears dry and granular and very little Serous, or any kind of Effusion escapes This increase Solidity of the Lung is combined in almost every case with more or less inflamation of the mucous membrane of the Bronchia extending in some instances to the Trachea. In a few instances Dr Cummins found the Trachea and Bronchia highly inflamed and containing a considerable quantity of purulent Mucous. In two cases in which no traces of inflammation could be detected in the Trachea

and Bronchia, The air cells were filled with a purulent mucous which Exuded in abundance on making a section of the Lung. Dr Cuming met with but one case in which there was no effusion appearance of disease in the mucous membrane of the Trachea Bronchia & air cells, and that was a case of Scirrhus Combined with Inflammation of the substance of the Lungs which Terminated fatally by Convulsions. The more intense the inflammation of the mucous membrane and the more Considerable the effusion into the Bronchia, the less in general is the induration, and "vice versâ" —

"With regard to the abdominal viscera besides the Enlargement of the mesenteric glands and tuberculer deposition in the peritonium already alluded to in some instances Dr Cuming found the liver unusually pale, in others it was in a state of sanguineous Congestion Enlarged and adherent to the parietes. In one case its surface presented a number of Dun coloured patches which penetrated for some way into its substance. The gall bladder adhered in one instance to the peritonium; in another the stomach was unusually Contracted, and in two cases the small intestines were more vascular than natural, and displayed a number of minute

Pathological Observations

It is manifest from the above developments, that this disease consists in a high grade of inflammatory action, seated in the mucous lining of the Bronchia and Trachea; in the substance of the Lungs and in their membranous investments. The pleural lining of the parietes of the Thorax is too, not unfrequently involved by the extensive incursions of this affection. Which is the primary point of attack is difficult to decide. The difficulty arising out of the impossibility of arriving at any positive knowledge of the symptoms of disease in children.

The Editors of the Journal in the place already quoted proceed to remark that as the disease is usually preceded by symptoms of Catarrh; it is probable that the inflammation commences in the mucous membrane, and is propagated from thence to the substance of the Lungs. Admitting Catarrhal are the first cognizable symptoms, I never the less think it exceedingly problematical that this disease commences in the mucous tissue of the Trachea & Bronchia and is thence propagated to the substance of the Lungs. I am inclined to believe that the pleural and Pneumonic involvement are often simultaneous with the Bronchial disease, because inflammation of those parts may exist & often does in Children too & can have no direct evidence of the fact.

In one instance I am confident this was the case. May I have every reason to believe that inflammation of those parts existed prior to that of the mucous coat of the trachea. Death is often consequent upon this disease at too early a period to allow the presumption that inflammation first seizes upon the tracheal apparatus and from thence extends to the substance of the Lungs, from thence to the serous coat, from thence again to the lining of the parietes of the thorax. In one instance under my care this disease commenced and ended in twelve hours. But there the Lungs displayed marks of inflammation in various points both upon their superior and inferior surfaces. It is true the mucous coat of the Larynx, Trachea and Bronchia presented traces of high inflammatory action. Yet it could be a matter of doubt to prove that in this instance the serous and cellular disease were the consequence of the mucous affection, one might with the same probability of correctness say that the disease commenced in the pleura or in the cellular and highly vascular substance of the Lungs and propagated itself from thence to the Bronchia, up the trachea even unto the Larynx.

Dr Cumings observes that death is caused either by suffocation occasioned by the accumulation of fluids in the bronchia, or that intolerable state of the substance of the lungs

by which they are rendered totally impermeable to the air. While the one Effect is owing to the effusion of pus or mucous into the air cells; the other seems to be the consequence of an Effusion of lymph into the cellular membrane that connects the air cells. Every case of death however from this disease that I have witnessed were evidently referrible to suffocation from the effusion of mucous or of mucopurulent matter into the air cells and bronchial tubes. In some instances in such quantity so as entirely to fill them and effectually prevent the admission of external air. In one case it is probable it was the consequence of both Effects conjoined.

Treatment

The pathological facts above established plainly point out the indications of cure in this disease; and justify us in adopting those laid down by Dr Cumming. viz "1st To arrest inflammation before Effusion takes place; 2nd Where Effusion has taken place to prevent its increase; 3rd To promote its

Absorption or Expectoration" —
The rapid progress of the disease, the importance of the organs involved, with the sufferings of the little patient require the immediate adoption of the most prompt and effectual measures to curb the action of the heart and arteries. For effecting this Blood letting both general and topical are the principle measures. There are few that do not need it. It is a great mistake observed (Dr Cuming) to suppose that Children do not bear Blood letting well. The necessity for its early employment cannot be too strenuously insisted upon. The disease may be conquered by it the life of the patient cannot be ensured without it. It is the remedy upon which we are principally to depend for the entire fulfilment of the first indication. The earlier it is performed, the less occasion will there be for its repetition. The quantity (as in every other instance in which the Lancet is used) to be always regulated by the violence of the symptoms. The strength of the patient and the benefits arising from it.

In those cases in which it may from some cause be deemed inexpedient to resort to general blood letting which will be found to be rare: Or when after the use of the Lancet it may still be thought advantageous to loose a small quantity of blood its Abstraction by cups and leeches will be found safe and beneficial Dr Cumming recommends the Leeches to be applied to the back of the hands or foot as the bleeding is easily stopped by applying Compresses of lint to the bites and certainly as after Venesection Subsidiary to the use of Venesection in this stage the exhibition of Cathartics is of eminent utility; both by Evacuation of ingesta which aggravate the Symptoms and also by diminishing the mass of the Circulating Fluids by exciting the internal Exhalants. They no doubt have an immediate effect upon the nerves of the Stomach By this they create nausea which depends upon a local action of the Stomach. and which by its sympathy with the rest of the System communicates an equal degree of Weakness to it. Calomel and Jalap are said by Dr Cumming to be the most Effectual. He also recommends their action to be kept up by the Combination of Submurias, 1 Gr. Ipecac 1 Gr. to be given every six or three hours. I have found the administration of a powder Submur. Gr. x. Ipecac. Gr. 1. followed by a Solution of Sulph. Mag.

And Emet. Tart. to produce a gentle Effect. a combination of Submurias ℈ Gr. Nit. Pot. Gss to Pulv And. Gss ℥j Gum Acac. Gss. M.

As a gentle Cathartic and excellent Diaphoretic this a Composition of invaluable qualities. The Action of the bowels if desired may be quickened at the same time by the use of the Saline cathartics. As a cooling diaphoretic I have found great benefit from a Solution of

Nit. Pot ℈ij. Emet. Tart. Grs ij.
Spt. Nit. Dul ℥ij. Gum Acac ℈j.
Aqua Simp. ℥viij. ℥ss every two or three hours.

In much oppression of the Lungs Dr Cumming found Emetics to be beneficial.

Having in a great measure quelled arterial action by premising the above remedies, assistance will be found to proceed from the application of Blisters to the thorax and between the shoulders (whether they act according to Rams as counter irritants, or according to the late Professor Darwin through the medium of the Sensorium. Their practical Utility is unquestionable. Such are the means of answering the indications of the primary or inflammatory stage during which there is often slight Effusion which by timely treatment may be absorbed or expectorated. But when as has been already stated Copious

Effusion has taken place all the resources of Art prove of no avail. We may apply our blisters. We may exhibit our Stimulants and Cordials. The best of which are the Cast. Ammonia. either simple or dissolved in a decoction of Senka. Cornu & Linet Tosted with Elix. Paregoric. But they are all Equally useless. The disease is beyond the control of the Physicians skill & unaffected by the attentions of sympathizing humanity. The diet should be of lightest and most nourishing kind. Every thing stimulating should be avoided. Sago. Tapico and milk and water with the Rubarb barley drinks is all that should be allowed in the first stage of the Complaint. To Children at the breast the mothers milk is probably the best and should always be allowed in preference to all others.
A more Cordial diet becomes necessary in the last stage. Acid Whey & C & C may be given.

An Inaugural Dissertation,

on

Hydrocephalus Internus,

Respectfully submitted,

to the examination of the

Professors and Provost

of

the University of Maryland,

for the degree of

Doctor of Medicine,

by

Garrett S. Layton

of

Milford

Delaware.

To

James P. Tolland M.D.

of

Milford. Delaware,

this Inaugural Dissertation

is inscribed,

by

his friend and pupil

Garrett S. Layton

An Inaugural Dissertation M.D.

To the Professors and Provost
of the University of Maryland.

Gentlemen.

The following dissertation on Hydrocephalus Internus is respectfully submitted to your examination.

The term Hydrocephalus although calculated rather to designate a consequence of this disease, than the primary affection, we shall continue to employ, as it is the one most generally adopted. This disease is called by Dr. Eberle Arachnitis, or an inflammation of the Arachnoid coat of the brain. It occurs most commonly during childhood, and the period of dentition is the age during which the greatest aptitude to the disease exists. That there should be a particular proneness to this malady during the process of dentition is easily understood. Whilst this process is going on, there is always more or less local irritation in

the immediate vicinity of the brain, connected with a general irritable and phlogistic condition of the system - circumstances which co-operating with the natural predominance of the cerebral circulation in infancy, are well calculated to invite to inflammatory affections of the head during this period of life.

There are various premonitory symptoms which precede the supervention of this disease, such as, fretfulness; variable appetite; irregular state of the bowels; tumid abdomen; foul breath; swelled upper lip; starting, and grinding the teeth during sleep, and other symptoms indicative of intestinal irritation. Dr. Yeates says that the digestive organs are always primarily engaged in producing this disease, the functions of which become deranged with various symptoms, and of this derangement the hepatic powers, from their great importance, partake largely; he would therefore be early upon the alert, and keep in view the consequences of a diseased state of the digestive organs upon the brain before any pain was complained of there.

The approach of this disease is frequently very gradual especially in children; in many instances the brain evinces

a very irritable condition for several weeks previous to the full development of the disease. The patient is wakeful; irritable in temper; evincing a repugnance to a strong light on account of the sensible state of the retina; the pupils are contracted; the disposition fretful and variable and the child often awaking from its sleep with starting and violent screaming. The symptoms commence obscurely, and are similar to those of irritation from worms. The patient complains of transient pains in the head alternating often with similar pains in the abdomen; the pain in the head is occasionally deep seated, and shooting from temple to temple, or across the forehead, frequently accompanied with sickness. The restlessness and irritability of temper increases; the pulse is irritated, quick, tense and active; the physiognomy expressive of discontent and suffering; one or both cheeks marked with a circumscribed flush; the eye-brows knit and frowning, and the eye-lids generally half closed. There is generally a sickness of the stomach; retching and vomiting especially when the patient is in an erect posture. One of the most common and characteristic symptoms of this disease is a frequent and deep

sighing and moaning; the skin is generally hotter than usual and dry; the tongue, for the most part, remains clean, or covered only with a thin, white fur, with pale, red edges. In cases which depend on gastric irritation, it is apt to be covered with a thick, brown fur, becoming dry and rough towards the termination of the disease.

After an indefinite period these inflammatory symptoms are succeeded by a new train of phenomena. The delirium is now more continuous; the pupils are dilated, the conjunctiva suffused and reddish; the eyes turned up under the upper lids during sleep; strabismus or squinting. Instead of being restless, and tossing about its arms, the child falls into a state of stupor, and is insensible to persons and things around him. The screaming fits are more frequent, and there is almost a constant moaning. Soon after this, paralytic affections generally occur. A tremulous motion of one arm, with the hand firmly contracted inwards is usually one of the first manifestations of paralysis in infants, and by degrees the power of using the arm and leg of one side becomes entirely lost. About this time the symptoms are apt to assume, deceitfully, for a short time, a milder

character; so imposing is the apparent improvement at times, that Dr. Gölis (De Good's Study Vol. 2. p. 292.) thought his patients on the point of recovery. But a relapse, after thirty six hours, in one patient and forty eight hours in another, took place and was speedily followed by death. This disease generally terminates in three or four weeks.

The establishment of a correct diagnosis in this disease is extremely difficult; it is, nevertheless of the utmost consequence. The great importance consists in distinguishing the diseases with which hydrocephalus is most apt to be confounded. As we before observed, the symptoms marking the first stage of the disease are very similar to those produced by intestinal irritation from worms. "When with a slow and irregular pulse, observes Dr. Whytt, (Essay on Nervous diseases. p. 199.) "we meet with thirst and a feverish heat, watching; a strabismus or double sight; a delirium and screaming succeeding the symptoms mentioned in the first stage, we may strongly suspect water effused into the ventricles of the brain. But this is still more evident, when soon

after, the patient grows comatose, the pupil dilates and loses its motion, the pulse becomes quick, the cheeks are flushed, and the tendons start and convulsions follow. In fever from intestinal irritation from worms, the abdomen is almost always tumid and hard, and there is generally diarrhea, whereas in idiopathic cerebral fever, the abdomen becomes flattened, costiveness almost invariably attends, and when alvine evacuations do occur, they are generally dark, glairy and unnatural. In cerebral fever the lips and edges of the tongue are usually red; in fever from intestinal irritation by worms, the root and middle of the tongue is covered with a thick fur. The pain in the head is often extremely severe and continuous in the former disease, whereas, in the latter, the pain is less severe, being obtuse and vague; the child seldom complaining of it as particularly distressing, and instead of directing his hand to the head as in the former affection, the child will be very frequently picking his nose, in the latter disease, in consequence of the itching there. The cheeks have generally a circumscribed flush on them in cerebral fever, but in irritation produced by worms, the face is commonly pale and leaden

colours. No one pathological symptom can be depended on, however, as Dr. Johnson observes (Eberle's practice vol. 1. p 173.) to distinguish the one disease from the other, but our conclusions must be drawn from the whole of the symptoms taken collectively.

Post mortem examination generally exhibits water effused into the ventricles. The vessels of the brain have occasionally been found discharged with blood, whilst there was no water in the ventricles; Scrofulous tumors have been found in the brain, on the surface of the liver, or in the lungs. The quantity of fluid effused varies considerably, from a few drachms to eight or ten ounces; at a mean measure, however, it may be stated at five or six ounces. The effused fluid does not coagulate on the application of heat, and this is the case with all other inflammatory secretions.

With respect to the nature and cause of hydrocephalus, various opinions are entertained. Dr. Whytt considers the disease to be a species of dropsy, and that the cause of it is the same with those of other dropsies, viz. "such a state of the parts as causes the exhalant arteries to throw out a greater quantity of fluid than the absorbents can take

up. This state of the parts he considers to be dependent on original laxity or weakness of the brain. There is no doubt that this is a species of dropsy and that the cause of it is the same with those of other dropsies, but we would ask, What are the general causes of dropsy? We cannot agree with Dr. Whytt in considering it dependent on original laxity or weakness; this was formerly the opinion, but it is now well established that dropsy depends primarily on an increased action in the arterial system, and the effusion or secretion in dropsy can as easily be prevented, if proper regard be had to the inflammatory stage as any other inflammatory secretion. The opinion that is now generally entertained, and we think very properly, is that it consists in an inflammatory action, and that the causes which produce it are those of inflammation generally. Dr. Parr objects to this opinion. He says "there is little doubt but that a diseased state of the brain exists previous to the accumulation of the water, and the great question is with respect to the nature of this state. We have little reason to suppose it inflammatory, for the disease does not attack strong healthy children, those over fed. or rendered

plethoric by too great care. If there be any Children peculiarly subject to hydrocephalus, it is the weak, the pale and the debilitated; This disease is found among Scrofulous Children principally, but we think that such Children may also have been exposed to the causes of inflammation, such as cold, changes of weather &c. and labouring under this Scrofulous predisposition, they are more liable to have this disease excited. The brain is often found suffused with blood, which cannot be accounted for but by supposing inflammation to have primarily existed. Dr. Parr considers the cause of this disease to be the accumulation of water in the ventricles, but this is only an effect and not a cause. He considers all remedies alike ineffectual; this opinion, we think, is fraught with danger. This disease, it is most lamentably to be acknowledged, does generally prove fatal, but we think, as we have before said, that if we can properly distinguish the premonitory symptoms, we have it in our power to arrest the progress of the disease, and thus save our little patients from so fatal a disease malady. Dr. Good says it has fallen to his lot to see several patients recover, both in infancy and verging towards adult age

who had all the characteristic marks of hydrocephalus.

The most common exciting causes of this disease are blows, falls, or other injuries of the head, causing more or less concussion; insolation, or as it is vulgarly called, a stroke of the sun; suppressed habitual evacuations; intense and long continued mental application; the intemperate use of ardent spirits; dentition; intestinal irritation; hooping cough; cold, and in short whatever is capable at once of deranging the digestive organs, and causing a determination of blood to the brain; the most common cause of the disease in children is the combined influence of dentition, and intestinal irritation on the brain.

Treatment. First, with regard to the prophylaxis. As has been said by Dr. Yeats, the digestive organs are almost always disordered in the commencement of the disease; hence, early and constant attention to the state of these organs should be paid. As soon as the child is discovered to become languid; its stools changed from their natural colour; a variable appetite, foul breath; abdomen tumid; a picking of the nose; pale and sickly aspect of the countenance, laxatives should be administered. These symptoms, as we said

before, are also those of worms, but this does not much influence the treatment. As the function of the liver is very generally deranged in the commencement, early recourse should be had to small doses of calomel, which should be followed by small doses of some of the milder purgatives. Dr. Eberle says, he has derived much benefit in some instances, by giving the blue pill every evening, followed by castor oil in the morning. When there are marks of inflammation in the brain, then our practice must be prompt and decided, for we may say, in this stage, almost all our hopes of saving the patient are concentrated. When there is a tense, quick, resisting pulse, pain in the head, indicated by the child frequently putting its hands to its head, then bloodletting is our sheet-anchor; the blood should be drawn freely, either generally or topically. Dr. Good speaks very highly of the practice of opening the temporal artery, especially in later life than infancy; he says "in a young lady of nineteen, labouring under very prominent symptoms of this disease, I found the violent and deep seated pain in the head cease instantly, and the pulse sink from seventy to forty four, as soon as a tea cup full of blood was abstrac-

ted in this way. Blood may be taken from the arm to the extent of six or eight ounces, in children. The head should be shaved, ice applied to it in a bladder, and a blister to the nape of the neck.

Purgatives are indispensable; they may be employed at the same time as bloodletting; some diaphoretic may be combined so as to determine to the surface. When the intestinal canal is loaded with feculent matter, producing, sympathetically, an influence on the brain, and keeping up the disease, the cathartic should at first be active, after which the bowels should be regularly evacuated three or four times a day by the use of small doses of calomel, promoted by castor oil and laxative enemata. The use of digitalis, as has been recommended by some, is very dangerous. "It excites too highly in its primary operation, and at last only diminishes sensibility at the expense of morbid excitement." (D. Potter.) We think it, in all instances, a dangerous remedy, and should never be administered by an incautious hand. With respect to the employment of mercury, various opinions are entertained. Some consider it a medicine of great importance, whilst others speak very unfavorably

of its powers. Drs. Percival and Gobson (Good's Study.) used it with great advantage. Dr. Hamilton (Hamilton on Mercury. p. 162.) says, "in no instance under my observation has that medicine ever proved successful"; and he even considers it sometimes calculated to occasion the disease. Mercury acts, primarily, as a general stimulant on the system, and hence cannot be employed when there is evidence of inflammatory action, but after the excitement has been reduced by the proper antiphlogistic means, then we may employ mercury, both internally, and externally by friction. It should be continued so as to excite a slight ptyalism; this however, is very difficult in children, but notwithstanding, it can just as easily affect the general system. James' Powder and Dover's powder have both been recommended; in the idiopathic form of the disease Opiates of every description must be carefully avoided, as their tendency to increase the flow of blood to the brain could hardly fail to prove injurious. When the disease depends on irritation in the bowels, by diminishing nervous excitability, Dover's powder may be employed beneficially, but it should not be given till the impetus of the circulation has been moderated, and the alimen-

tary canal well evacuated.

It has been said when effusion has taken place, it cannot be taken up. Dr. Potter, however, is of a contrary belief; he believes absorbents to exist in the brain, and says, "if the secretion can be arrested by the antiphlogistic means, the absorbents may, and do remove the secreted fluid." If we mistake not, we saw a patient recover under Dr. Potter's hands after effusion had taken place; it was the case of a man in the Baltimore Infirmary, about two years since, who was labouring under the strongest marks of an effusion; ~~into~~ dilated pupils, partial paralysis, especially of the tongue, a constant dull pain in the head, and slow pulse; this patient was put upon frequent & small doses of calomel, occasionally venesection, and after some weeks the water was absorbed, and the patient discharged entirely relieved.

In conclusion, Gentlemen, permit me to offer you my best wishes for the prosperity of our much respected Alma Mater, hoping that she may continue to sustain her merited reputation, and hold a high and elevated rank among the scientific Institutions of our Country — Garratt F. Layton

Essay

Upon Puerperal Fever

When we take into consideration the diseases, incident to the Human Family, none more imperiously calls for the aid of the healing art, than those, which attack the Female Sex in the puerperal state. At a very early period we find the Ancients engaged in devising means, to arrest the progress ~~the progress~~ of them and to alleviate their symptoms; but from the imperfect state of the medical Science at the time, that the first attempts were made to moderate the severity of puerperal diseases, their exertions were generally ineffectual and their expectations disappointed.

The Moderns profiting by their errors, have been more fortunate and have arrived to a much greater degree of correctness as to the pathology and treatment of the diseases under consideration. It is to the writers of the last Century, that we are particularly indebted for the improvement of the obstetrical department of our Science. Under the auspices of an Osborne, a White, a Baudelocque, Hamilton, Evans, Denman and many others the Science

Could not fail to improve; and at a later period may we not mention an Armstrong and many of our own Countrymen equally accomplished for genius and attainments and devoted to the improvement of this important part of our profession.

Although so much has been done for the advancement of medical knowledge, yet experience and observation teach us, that much remains still to be done.

From the numerous diseases, that Child bed women are liable to, I have selected Puerperal fever as the subject of this essay.

Puerperal Fever from the time of Hypocrates has been Considered a very dangerous disease, and Certainly there is no affection, to which mankind is heir to, that requires more promptness and skill on the part of the Physician than this to remedy. But since the improvements of medical science have procured to more Correct views of the treatment of this disease it is Considered a much less fatal malady. On no Subject has there been a greater diversity of opinion, than upon the treatment and pathology of Puerperal Fever: not only as to its treatment and pathology but likewise as to its Locality

Authors consulting their own fancy more than observation or led astray by some preconceived opinion, have given seats to this disease in different parts of the System: nor is it surprising that they should have differed, when we take into consideration how many parts are concerned so important to the animal economy and how extensive a sympathetic connection they have.

Puerperal Fever, according to Dr Armstrong, is an affection of Child bed, in which there is a general disturbance of the functions attended with an increase of the animal heat, an acceleration of the pulse and evident or obscure signs of abdominal inflammation. But it must be obvious that the above definition does not embrace all the modifications that fever assumes in the Childbed state: for although when any shock occurs, the abdominal viscera are by far the most frequently affected, yet the other parts may be simultaneously or separately inflamed; and indeed a fever might occur in child bed, when the blood is so equally distributed, as to make it wholly unconnected with inflammation: a general disturbance of the functions, an increase of heat, an acceleration of the pulse and a change in the secretions being then its leading signs. There is undoubtedly much difficulty in forming a just idea of so complicated a disease and in proportion to the difficulty is our attempt

to make accurate distinctions is deserving of Commendation. But however symptoms may vary from affections of particular parts or in particular Constitutions, there is but one essential nature of the disease; and if we have a true notion of of this, we have less reason to be solicitous about the Cause or the termination of the part originally or principally affected. For a similar treatment may be enjoined with equal propriety, whether we, as some have done Consider it an inflammation of the intestines, the Uterus, peritoneum or one in which the whole parturient apparatus is Concerned.

Causes

The knowledge of the Causes of puerperal fever, whether occasional or immediate, will be of service rather in enabling us to prevent it, than in leading us to the Cure, when it is formed; for if a Patient be brought into a Certain state, the peculiar Cause having given rise to it, will not demand any material difference in the treatment directed for her relief. We have certainly great reason to lament, that rash and inconsiderate treatment and the want of Common Care during the puerperal state frequently give rise to this disease. But independent of such Causes and the Changes of their Constitutions by particular modes of living women in a parturient state are much more liable to this

-cate than females of the Brute Creation. the erect position of the Body, the different structure of the Uterus and placenta, and the passions, though necessary and perfectly adapted to the rank in which providence has placed mankind, become permanent Causes of much pain and may eventually produce much inconvenience and even disease. Considering these things we shall not be at a loss to explain why women are subject to so many Complaints during pregnancy that other Creatures are entirely strangers to. During the period of Uterogestation there seems to be a disposition to inflammation on account of the Changes that take place in the System, and this disposition, if acted upon by stimuli sufficiently powerful will produce disease. Nor is it improbable, but that, by the sudden removal of pressure made by the grand Uterus a greater portion of fluids, than Circulates even in a natural state, may rush upon some particular part and from a very slight obstruction, Cause a local plethora and disease. Improper management at the time of Labour especially rude treatment of the Uterus and a violent and hasty seperation of the placenta will often give rise to this disease In short every Cause Capable of producing either local inflammation or fever under any Circumstances

will at this time be followed by greater effects; and any disturbance raised in the Constitution will, after delivery, be invited as it were, to parts already in a state of great inability, from the violence they have already undergone.

Diagnosis

As different Authors have located this disease in different parts of the system, any attempt at a correct diagnosis must be fruitless until some part or parts be determined upon as the seat. Some Writers have endeavoured with great minuteness to draw lines of distinction between puerperal fever and peritonitis or inflammation of the peritoneum. But we are taught by dissection that all cases of this disease implicate the peritoneum more or less and indeed it is the opinion of many skilled in the obstetrical department, that puerperal fever is an inflammation of the peritoneum with which some of the other viscera may be complicated. Hence if in any therapeutic view, the puerperal fever should be thought essentially different from the ordinary peritonitis of lying in Women, the distinction would in this have a tendency to lead us from the true pathology of the disease, than instruct us in any practical point of view. Under this consideration I shall only procede to give the character

is the symptoms distinguishing it from milk fever, after pains inflammation of the uterus and Ephemera a disease to which child bed women are very liable.

The milk fever is known principally by throbbing, irritation and enlargement of the breasts and by the pain being confined to the mamma during the continuation of the febrile symptoms; whereas in the puerperal fever the pain is situated in the abdomen and continues there during the progress of the disease, while the breasts in a majority of cases are neither distended or painful, but rather more flaccid than usual. Moreover there is a much more considerable degree of lassitude and weariness, there is a more urgent nausea and oppressive sickness at the stomach in the puerperal fever than in the milk fever. the pulse likewise is much more frequent.

In after pains pressure can be borne without uneasiness but in puerperal Fever the abdomen is much more sensible to the touch and pain is always aggravated by pressure. In the first attack there is no accession of fever nor is there any acceleration of the pulse. The pains are grinding and succeeded by intervals of tolerable ease like those

those attending labour; as the Lochia on the contrary in puerperal Fever there is an accession of fever marked by an uncommonly rapid or quick pulse and the pain is without intermission.

Hysteritis in its simple form may be known by a burning & throbbing pain, fullness in the region of the uterus attended with oppressive pain, a frequent desire to discharge the contents of the Bladder, which is done with great pain and difficulty. It may likewise be known by the hardness of the uterus to the touch, by its imparting a pungent heat to the hand when applyed over it. by its increased size, by its acute sensibility, by violent pains darting through the Back, down the groin and thighs and from an increas of pain from raising the Body or trunk erect and by the soreness and fullness being confined to the lower part of the abdomen throughout the attack. When the above symptoms appear, with increased heat, thirst, quick pulse, Sickness of the stomach, and suppression of the Lochia, there can be no question as to the seat of the disorder. Nevertheless, however plain these symptoms

appear, and how evident these distinctions seem to be
yet from dissections it is certain, that Hysterites very often
constitutes a part of the abdominal inflammation attendent
upon puerperal Fever; nor will this appear at all surpri
sing, when we consider that after the seperation of the placen
ta, the uterus is in reality a kind of recently wounded
member, to which inflammation may be readily imparted, especially if the Lochial discharge, as frequently happens,
be diminished or suspended. When simple Hysterites does
take place, Dr Denman judiciously remarks, that it is much
less dangerous, particularly after parturition, than an equal
extent of inflammation in any other of the abdominal
viscera: because the Uterus is a kind of outlet, which
admits of a return of the lochial discharge, which may
lessen and even remove the disease

The Ephemera called the weed is ushered in by strong
rigours, which commonly are in less than an hour followed
by heat and thirst, and genral excitement. the whole
train of the Symptoms being terminated in twenty four
or thirty six hours with a profuse perspiration. The ab

sence of Abdominal pain and irritation is generally sufficient to prevent the possibility of mistaking this dis case for puerperal fever

Symptoms

This diseases generally Commences on the third or fourth day after delivery. But the time of its attack is uncertain for there are not wanting instances, in which it has been evidently forming before delivery or during labour or it may take place at any time for Several weeks afterwards. Previous to the attack, the patient experiences great debility, and is molested with wandering pains in the Abdomen, which are Commonly premonitory Symptoms.

The attack generally Commences with a Chile or Cold fit, which is succeeded by pains and tumefaction of the Abdomen, even to As are previous to delivery, severe pains in the hips, back, and in some Cases in one or both legs; these symptoms are followed by short and anxious breathing, quick pulse, attended with that vibration and strength observable in diseases of an inflammatory character, increased temperature of the Body, prostration of the vital powers, moreover by intense pain in the forehead, peculiar wildness of the eyes, suppression or diminution of the quantity of milk and Lochia, flaccid state of the mamma and an unusual

devoted their youth to debauchery and the pursuits of sensual gratification.

To these we would apply the words of the Poet,

——————Go seek the cheerful haunts
Of men, and mingle with the bustling Crowd;
Lay schemes for wealth, or power, or fame, the wish
Of nobler minds, and push them night and day;
Or join the Caravan, in quest of scenes
New to the Eye, and shifting every hour
Beyond the Alps, beyond the Apennines.
Or more adventurous, rush into the field
Where war grows hot, and raging through the sky
The lofty trumpet swells the Maddening Soul;
And in the hardy camp, and toilsome march,
Forget all softer, and less manly cares.

state of the excrements accompanied by a diarrhoea. There are other symptoms attendant upon this disease but those enumerated above may be considered pathognomic. Dr Denman speaks of a peculiarity in this fever, which I believe has not been hitherto observed or mentioned. It is an erysipelatous tumour of a dusky red colour, on the ancles, wrists, elbows, knees or knuckles about the size of a shilling and sometimes larger. This is almost universally a mortal sign, and on the inspection of those who have died with this appearance, the disease has been found principally to have affected the uterus and its appendages. When this disease commences soon after delivery and continues its progress with violence for a few days, our hopes for a recovery will often be disappointed and the impending danger may be usually foretold by the uninterrupted progress of the symptoms or by returns of the rigour

Treatment

Being persuaded, that much of the diversity of opinion respecting the treatment of puerperal fever, has arisen from a want of a proper attention to the distinction between the stage of excitement and the stage of collapse. I shall endeavour to discriminate these